

BUSINESS WEEK

JUNE 14, 1947



Dwight Palmer Griswold: The first ounce of prevention (page 8)

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JUN 14 1947

What do you make for these new homes?

IT MIGHT BE electric wiring...or paint...or lumber. No matter what you make, the chances are that a Socony-Vacuum Process Product can help you make it better at lower cost.

Special derivatives from petroleum, these Process Products are now serving 30 U. S. industries. New uses and entirely new products are being added all the time.

This picture shows materials from nine different industries now going into new home construction. The key below lists the Process Products developed to improve the processing of these materials. Study this key; then investigate Process Products for a solution to your processing needs.

SOCONY-VACUUM OIL CO., INC., 26 Broadway, New York 4, N.Y. and Affiliates: Magnolia Petroleum Company, General Petroleum Corp.



Key to this picture . . . and better processing for you!

- | | | |
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| ① Bricks, Masonry . . . Wax emulsions give water-repellent, transparent coating. | ④ Packaging . . . S/V Ceremul A, as top size for paperboard, increases moisture resistance. | ⑦ Insulation . . . Oils and waxes lay dust in mineral wool, waterproof fibers. |
| ② Paints & Varnish . . . Special solvents for resins improve quality. | ⑤ Lumber . . . S/V Ceremul M prevents cracking of grain surfaces in drying. | ⑧ Textiles . . . Special S/V Products make awnings and other fabrics water-repellent. |
| ③ Air Conditioning . . . S/V Sovabeads used in equipment to control humidity. | ⑥ Ceramics . . . Wax emulsions provide uniform glaze for whiteware, porcelain. | ⑨ Electric Wiring . . . S/V Sovaloids serve as plasticizers for rubber insulation. |

Another contribution from a progressive industry

Socony-Vacuum Process Products

TUNE IN THE MOBILGAS PROGRAM — MONDAYS, 9:30 P.M., E.D.T. — NBC



A development of
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FIRST IN RUBBER



Inside story on why B. F. Goodrich truck tires are better than prewar tires

A typical example of B. F. Goodrich improvement in tires

THE unretouched photograph on the left shows the nylon shock shield directly beneath the tread of a B. F. Goodrich truck tire which had 43,184 miles of actual highway service. Hardly a cord is damaged! The tire was good for recapping—possibly several times.

Compare the photograph on the right which shows what happened directly beneath the tread of a truck tire without the nylon shock shield during 38,147 miles of the same kind of service. Those frayed, broken cords were caused by millions of sharp impacts . . . by the relentless pounding that so often leads to bad bruises, blow-outs,

and the scrap pile before the tire is actually worn out.

The reason for the tremendous difference—so accurately pictured above—is the *nylon shock shield* now built in right under the tread of every B. F. Goodrich truck tire size 8.25 and larger.

Nylon shock shields in new B. F. Goodrich truck tires give extra protection to the rayon cord body. Result, a four-way saving for truck owners: (1) Average tire mileage is increased (2) Tires have greater resistance to bruises (3) There's less danger of tread separation (4) More tires can be recapped.

The development of truck tires with nylon shock shields is typical of the

constant improvement being made in all types of B. F. Goodrich tires. Only from B. F. Goodrich can you get truck tires built with a weftless rayon cord body. Only from B. F. Goodrich can you get the added protection of nylon shock shields.

Though nylon makes tires more expensive to build, these new B. F. Goodrich truck tires sell at regular prices. The B. F. Goodrich Company, Akron, O.

Truck Tires BY
B.F. Goodrich

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BUSINESS WEEK • June 14, 1947

SERVICE

COST OF GOVERNMENT is coming down—but not as much as you have been led to believe.

The big appropriations bills to run the agencies in the next fiscal year (it starts in just two weeks) are far enough along now so you can get a pretty good picture.

House cuts from Truman's \$38-billion budget for fiscal '48 won't exceed \$4 billion; this is evident on the basis of action on eight of the 12 major bills.

The Senate is farther behind; it has acted on only three bills. Its record on these: net restoration of \$80 million to House figures.

Prospect is for a federal budget of somewhere around \$34 billion to \$35 billion.

That's bigger than G.O.P. leaders promised in their winter book: House voted last January to knock \$6 billion off Truman's figures; Senate said \$4½ billion.

But it's a lot less than government cost in the year now ending.

How much the government will collect next year depends on whose estimate you take. Assuming no tax cut, Truman expects collections of \$38,900,000,000. Senate Republicans put the figure at \$41,400,000,000.

The government is ending this fiscal year in the black.

It's the first time since 1930—hardly a high school student can remember the day!

The government will have spent \$41,200,000,000 when it closes its books June 30 on fiscal '47. Its income for the year totals \$42,500,000,000.

IF YOU MISS bituminous coal output figures from our Figures of the Week page this issue, you'll have a small sample of what it means to cut the cost of government.

For years, Bureau of Mines has collected these statistics. Last week, all the help on the job was fired.

Reason: The House cut out all \$350,000 in Truman's budget for this work in fiscal '48, forced Interior to fire the employees right away.

House agreed the statistics were useful, but said industry could collect them at its own expense. Whether the service is resumed depends on how

much money—if any—the Senate decides to put back.

THE WHITE HOUSE has got nearly a half-million letters and postcards advising Truman what to do with the Taft-Hartley labor bill.

As you would suspect, the advice runs highly partial to a veto.

But the volume still isn't so heavy as it was on last year's Case labor bill, or on the rail strike crisis.

And oddly enough, Truman's mail on the G.O.P. tax-cut bill hasn't been enough to tabulate.

He must act on the tax bill by Monday, June 16, on the labor bill by Friday, June 20. We still look for two vetoes; for Congress to override to make the labor bill a law.

But even labor men see a bright side in the prospects. If the labor bill becomes law, they're quipping, it will be: "Hell for labor, purgatory for business, paradise for lawyers."

RAILROADS PREVIEWED THEIR CASE this week for another hike in freight rates (page 32).

Application to ICC for a second-round boost will follow settlement of pending rail labor contract talks. That will be late summer.

The rails will ask at least another 12% to 15% increase. That much, they said, would be needed just to pay the 20¢-an-hour pay hike the unions want.

Changes in operating rules—also demanded by the unions—will add to your prospective freight bill.

Speaking at hearings on making permanent the 20% interim increase in Express Agency rates, rail spokesmen made it plain that they feel present rates, on present volume of business, are their minimum. They fixed 1947 net—with business at record levels—at 3½% on capital.

THE OIL SHORTAGE currently cramping the military and due to hit you by winter (BW—May 17 '47, p48) is a good bit worse than you've been told.

So critical is the situation that there's to be a Cabinet-level session next week to see what the government can do—or should do—to straighten out the supply-demand picture.

Meeting has been called by Krug. It carries

WASHINGTON OUTLOOK (Continued)

Truman's direct blessing. And it's supposed to work out definite government policy.

Army and Navy expect to demand at least informal priority to get their oil needs filled first.

More than just oil for ships is at stake. Army isn't even getting enough gasoline for jeeps in Germany. Both services are getting only about 15% of the aviation gas they want.

Also, both services have been drawing down on stocks. They say this must halt, that they must refill their storage tanks.

If the military gets its way, Krug's meeting will face the question: How to split up what's left among domestic users—both business and personal?

Talk runs to some form of cooperative industry-government rationing at the distributor level. Attorney General Clark will be pressured into waiving antitrust aspects of such a setup.

As yet, no consumer-level rationing is in prospect. But it could come.

IF YOU HAVE OBJECTIONS to the data forms used in past years for the Census of Manufactures, now's the time to say how you would like them changed.

Census Bureau is drafting the schedules for next year's tabulation of manufactures. The forms are due to go to the printer by Sept. 1.

Census is asking industry's suggestions as to what kinds of information to collect, how to phrase its inquiries.

But the bureau won't guarantee to please everyone. Budget limits usually make it impossible to collect all the data requested.

Whether there will be a Census of Business next year, too, is still up to Congress.

A Senate-approved bill is tied up in the House. But there's still a chance it will get through.

DID TRUMAN INTEND to rewrite sections of the portal-pay law in the special message attached to his approval of the measure?

Sen. Wiley's Judiciary Committee is stewing over the question.

They fear that if Truman's remarks go unanswered the courts may take judicial notice of

them in future cases. So they've written a rebuttal accusing Truman of usurping legislative function by stating his opinion of what Congress meant.

But they can't decide whether to issue it.

REGULATION BY CONFERENCE—that's a phrase you will want to get to know

It's Federal Trade Commissioner Mason's label for his scheme to end unfair trade practices through industry-FTC conferences and policies. He would substitute these for FTC's one-shot cease and desist actions against individual concerns.

Mason got the U. S. Chamber of Commerce to poll its local chapters on what they think of the idea.

Composite reply: The theory's O.K.—but how do you keep the chiseler in line without the plan's becoming another NRA, or tangling business with the antitrusters?

Mason takes the C. of C. replies as an endorsement of his one-man crusade. He thinks it's time to make a pitched battle with so-far reluctant federal low commissioners.

His next moves: (1) Get Congress to go along with Truman's request to double FTC's budget for conference-type work, and (2) get Truman to give him a working colleague on FTC when aging Commissioner Ayres retires this summer.

CRACK OF THE WEEK (overheard in a Capitol lobby as comment on trips by Stassen and Warren to see Dewey):

"I see Dewey spent the week looking over prospective running mates."

But equally good, from a Washington cocktail lounge, is:

"I see Stassen is continuing his interviewing of chiefs of state."

• There's more than idle gossip in talk that ex-Sen. Burton Wheeler may replace Attorney General Clark. Wheeler wants the job; he has quit as counsel for the G.O.P. Brewster committee which seeks a peek at F.D.R.'s personal files. . . .

• Republican leaders intend to recess Congress next month—instead of adjourn. They want to retain a voice in deciding whether there's to be a special session, not leave it up to Truman alone. . . .

• Your war damage insurance premiums are to be lumped into the government's general fund, by order of Congress. Total unused premiums exceed \$210 million.



f gasoline were sold in crates...

you would expect to see labels giving specifications, information about quality, and ingredients pasted right on the crates. However, since you take gasoline home in your own gas tank, there's no way to actually label each gallon you buy. That's why oil companies put "Ethyl" trade-marks on their pumps. The familiar yellow-and-black emblem means that they have improved their best gasoline with "Ethyl" antiknock compound—the famous ingredient made by the Ethyl Corporation to step up power and performance. *Ethyl Corporation, New York.*

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BY THE MAKERS OF

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HEATING SYSTEMS

THE COVER

In Berlin last week ex-Gov. Dwight Palmer Griswold of Nebraska was winding up his job as director of internal affairs and communications in the U. S. zone. His next jump will carry him to Athens. There, as head of the U. S. mission supervising Greek aid, he will hold the pursestrings on the millions that the Truman Doctrine will siphon into the tottering Greek economy.

• **Republican**—President Truman's appointment kicked up little fuss. The Senate was quick to confirm. There were, of course, a few gripes. Some Democrats were miffed because the 53-year-old Nebraskan is a Republican. Some Republicans are lukewarm because he is a Stassen man. Griswold's major political asset is a record for economy at home, and for untiring, efficient work.

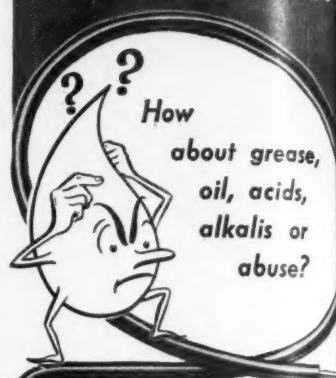
The man who is moving into one of the world's hot spots is the son of a homesteader who turned merchant and finally banker. Griswold, a 200-lb. outdoorsman, tried banking himself after mustering out of the Army as a captain in 1918, then in 1922 bought part ownership of the Gordon (Neb.) Journal. He moved up through Nebraska's legislature to the governorship for three terms (1940-46).

• **Job Ahead**—The outsize pattern of the job ahead of Griswold emerged clearly from the recent report turned in by Paul A. Porter, who led the American Economic Mission to Greece. Always poor, Greece has sunk lower under profiteering, inflation, and civil strife. The \$700 million in foreign money poured into Greece in two years has done little good. Some 20% of the country's 7,500,000 people live wholly or partly on the state; its 1947 budget deficit may run to \$290 million, three times the currency in circulation.

Griswold will try to simplify the Greek tax structure, raise and enforce the income taxes, reduce the military budget, shrink bloated civil-service lists, establish a wage-price policy. His staff of 40 experts will probably have a say-so over considerably more than the \$300-million of Near East aid that is earmarked for Greece. This could include post-UNRRA (\$50 million) and Export-Import Bank funds (\$25 million), plus \$145 million worth of UNRRA and allied surplus property. And if the U. S. carries out Porter's projected five-year reconstruction plan, it may mean another \$335 million.

The Pictures—Knopf-Pix—Cover; Acme—17, 47, 99; Int. News—26; Press Assn.—32, 41, 90, 109; Harris & Ewing—86; Charles Phelps Cushing—112; Reni Newphoto—18; Meyers Studio—20; United Air Lines—22; Ford News Bureau—15; Frank Cardina—31; European—61; Fabian Bachrach—64; Canada Wide Photo—104.

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14, 1947

Winter wheat already is being harvested in the Southwest's earliest

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
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fields. It is "made" in most of the belt. Thus the Dept. of Agriculture's estimate based on June 1 condition should come very close.

But with spring wheat it's different. Condition as of June 1 indicated a crop of 317 million bushels. That could be far from the mark; lots of spring wheat is little more than out of the ground.

At any rate, spring and winter wheat on June 1 looked like a 1,400,000,-000-bushel crop, topping even last year's record by 250 million.

Aid to stricken peoples will see about 375 million bu. of U. S. wheat exported in the crop year which ends this month. That's not far below the 391 million bu. shipped in the 1945-46 season.

And as much as 700 million may be available for 1947-48 export.

The new crop, which now looks like 1,400 million bu., will be augmented by old-crop carryover of 75 million. Home consumption would be very large if it topped 750 million bu.

Foreign needs will be large again next winter. Yet it will hardly be physically possible to move more than 500 million bu.

Thus we are on the road back to surpluses. The 200 million bu. or so left over on July 1, 1948, won't be burdensome, it's true, but such a growth in stocks will be a danger signal.

Farm cash income was up 30% in the first five months of this year as against the like 1946 period. If that kept on, 1947 would hang up a record farm income of something over \$30 billion.

Such an achievement is hardly likely, however. Gains so far have been mostly a matter of higher prices, and prices are due to go down.

Meat prices, now threatening to break away, promise to be lower in the fall when slaughter runs increase. But for early and vigorous government buying, wheat would be tumbling on the bright crop forecasts.

Prospects for other crops are not yet clear. Probably few other than wheat will break any records for size. Even so, a decline in over-all purchasing power is expected to work for lower prices.

Some farm prices have quite a way to go before the government is required to step in and support them; others not so far.

Eggs now are only a few percentage points above 90% of parity, potatoes only a hair. Hogs, on the other hand, could come down by a third before reaching the support level.

Sugar will be so ample (barring a maritime strike) that some competitors such as sirups and honey face a price comedown.

A. E. Staley Mfg. Co., in fact, won wide publicity for warning its corn-sirup customers to go easy on inventory. Relaxing of sugar controls, however, may mean a temporarily chaotic market.

Watch synthetic rubber. Canada has just cut 2¢ a lb. under our government's selling price of 18½¢.

Canada's output isn't big enough to have anything but a psychological effect marketwise. But U. S. consumers have long contended that our price is higher than production costs and natural crude prices warrant.

We balked at the world copper price and it sank to our 21½¢ level.

FIGURES OF THE WEEK

THE INDEX (see chart below). *191.7 191.2 191.6 162.3 162.2

PRODUCTION

Steel ingot operations (% of capacity).....	96.9	97.0	94.2	76.1	97.3
Production of automobiles and trucks.....	93,443	174,315	94,756	40,900	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$20,200	\$19,034	\$17,391	\$21,613	\$19,433
Electric power output (million kilowatt-hours).....	4,635	4,429	4,653	3,920	3,130
Crude oil (daily average, 1,000 bbls.).....	5,064	5,024	5,005	4,896	3,842
Bituminous coal (daily average, 1,000 tons).....	#	2,137	2,095	740	1,685

TRADE

Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars).....	85	84	86	77	86
All other carloadings (daily average, 1,000 cars).....	64	64	61	35	52
Money in circulation (Wednesday series, millions).....	\$28,261	\$28,211	\$28,197	\$28,159	\$9,613
Department store sales (change from same week of preceding year).....	+12%	+13%	+12%	+32%	+17%
Business failures (Dun & Bradstreet, number).....	66	72	98	13	228

PRICES (Average for the week)

Spot commodity index (Moody's, Dec. 31, 1931=100).....	398.9	395.0	401.1	285.3	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	261.4	259.7	264.4	178.2	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	349.0	344.1	339.9	253.0	146.6
Finished steel composite (Steel, ton).....	\$69.82	\$69.82	\$69.82	\$63.54	\$56.73
Scrap steel composite (Iron Age, ton).....	\$32.00	\$31.17	\$29.58	\$19.17	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	21.740¢	21.981¢	22.788¢	14.375¢	12.022¢
Wheat (Kansas City, bu.).....	\$2.56	\$2.75	\$2.66	\$1.87	\$0.99
Sugar (raw, delivered New York, lb.).....	6.19¢	6.19¢	6.19¢	4.20¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	37.11¢	36.26¢	36.15¢	28.74¢	13.94¢
Wool tops (New York, lb.).....	\$1.448	\$1.391	\$1.497	\$1.330	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	17.53¢	17.22¢	22.08¢	22.50¢	22.16¢

FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	115.5	114.5	114.6	149.1	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's).....	3.21%	3.20%	3.15%	3.03%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's).....	2.54%	2.53%	2.53%	2.50%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	1 1/4-1 1/2%	1 1/4-1 1/2%	1 1/4-1 1/2%	1.00%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1%	1%	1%	1%	1-1 1/2%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	40,139	39,902	39,316	39,471	23,876
Total loans and investments, reporting member banks.....	54,606	54,924	55,035	63,331	28,191
Commercial and agricultural loans, reporting member banks.....	10,630	10,674	10,849	7,469	6,296
Securities loans, reporting member banks.....	2,183	1,963	1,746	4,100	940
U. S. gov't and gov't guaranteed obligations held, reporting member banks.....	33,843	34,479	34,544	45,222	14,085
Other securities held, reporting member banks.....	3,525	3,453	3,499	3,367	3,710
Excess reserves, all member banks (Wednesday series).....	670	510	660	738	5,290
Total federal reserve credit outstanding (Wednesday series).....	22,234	22,019	22,230	23,450	2,265

*Preliminary, week ended June 7th.

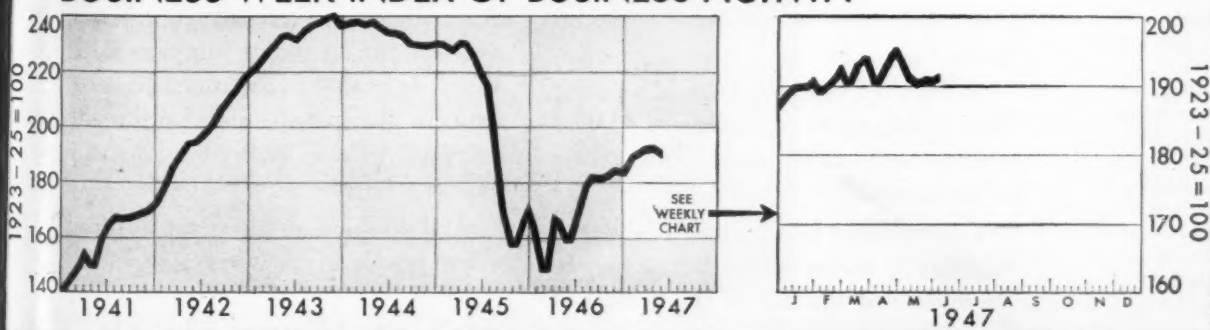
‡Ceiling fixed by government.

#Not available at press time.

†Revised.

‡Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





Millions of calls are made-to-order every hour

Every telephone call is made-to-order on the spot.

This is not a mass production industry. There's no way to manufacture a lot of telephone calls in advance and store them for future need.

Your call may be across the street. The next may be across the country. It may be the middle of the day or the middle of the night.

But whenever you call and wherever you call, the telephone company must be ready. It must — in a matter of seconds — provide the people and equipment to carry your voice to any one of millions of other telephones near or far.

And do the same thing for millions of other people every hour.

BELL TELEPHONE SYSTEM



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Consumers Have the Money

But will they spend it? Reserve Board survey shows they are eager for autos, but plan to cut down buying of other durable goods and houses. They expect good times—and lower prices.

There is a \$5-billion to \$7-billion market for new automobiles this year—if manufacturers can step up production fast enough to tap it. Producers of other durable consumer goods and residential building contractors face a drop in business.

That, at least, is the way consumers are planning their spending. Whether or not things work out just that way will depend largely on what happens to production, incomes, and prices over the rest of the year.

• **Survey**—Businessmen got their first good look at their customers' 1947 intentions this week when the Federal Reserve Board took the wraps off its ambitious survey of consumer finances (savings, liquid-asset holdings, and spending plans). The study was made by Dr. Rensis Likert's Survey Research Center,

at the University of Michigan. It is the companion piece to the survey of liquid assets that Likert ran for the board in 1946 when he was with the Bureau of Agricultural Economics (BW—Aug. 24 '46, p. 19).

Taking the two surveys together, the Reserve Board's experts can draw some fairly definite conclusions about what happened to consumer savings and spending in 1946. These conclusions in turn can provide the jumping off point for estimates of the 1947 market.

• **It's Good News**—This year's study sketches a fairly bright picture, in general. The buying public still has money and still wants to spend it. Many consumers had to dig into their savings in 1946, but total holdings of liquid assets kept on growing.

Most people think there are good

OPTIMISM GROWS

Most consumers are more optimistic about the future now than they were a year ago. These are the answers that the Federal Reserve Board survey got to a set of general questions about the future as buyers see it:

	Percentage Distribution of Spending Units	
	1946	1947
General economic outlook:		
Good times ahead.....	35	55
Uncertain, no change....	23	21
Bad times ahead.....	36	22
Not ascertained.....	6	2
Total.....	100	100
Own Incomes:		
Will be larger.....	25	26
Will be about the same..	34	42
Will be smaller.....	23	12
"It depends".....	13	18
Not ascertained.....	5	2
Total.....	100	100
Price changes:		
Will go up.....	53	13
Will remain the same....	21	22
Will go down.....	8	46
Conditional answers....	13	17
Not ascertained.....	5	2
Total.....	100	100



The lines of customers will continue to be longer than the assembly lines.

times immediately ahead. Less than one-third expect a drop in their incomes or are uncertain about their futures.

• **Bad News**—But here and there warning signals are showing. Consumers are complaining about the pinch of high prices. Almost half think prices will go down soon—and if they are disappointed, they may have to cut their buying plans accordingly. The first eager demand for consumer durables (except automobiles) is satisfied. Consumers are budgeting smaller amounts for these items in 1947.

Even more significant, the demand for houses clearly shows the strangling effects of high prices and costs.

• **Sampling**—The survey bases its conclusions on some 3,000 interviews with a carefully selected sample of the nation's "spending units." (It defines a spending unit as a group of people living under one roof and pooling their incomes to meet major expenses.) The sample was too small to permit detailed breakdowns, but the experts think it provided accurate answers to the broad questions.

Here are some of the highlights:

• **Personal holdings of liquid assets**—defined in this study as government bonds and bank deposits—rose about \$8 billion in 1946. (Currency ordinarily is included in estimates of liquid assets, but the

What Consumers Intend to Buy

The Federal Reserve Board's latest survey of consumer buying plans reveals a still-ravenous market for new cars but a smaller demand for other consumer goods and houses. This is the way actual buying last year compares with consumers' expectations then and now:

Type of Purchase	Percentage of Spending Units	Number of Spending Units (Millions)	Average Price	Total Expenditure (Billions)
Automobiles:				
Purchases planned, 1946—total...	9.6%-12.2%	4.4-5.6	\$1,100	\$4.8-6.2
New cars.....	7.4-9.3	3.4-4.3	*	*
Used cars.....	2.2-2.9	1.0-1.3	*	*
Actual purchases, 1946—total...	10.6	5.0	920	4.6
New cars.....	3.3	1.5	1,620	2.3
Used cars.....	7.4	3.5	630	2.3
Purchases planned, 1947—total...	10.0-13.4	4.6-6.2	1,300	6.0-8.1
New cars.....	7.3- 9.7	3.4-4.5	1,540	5.2-7.0
Used cars.....	2.7- 3.7	1.2-1.7	650	0.8-1.1
Other selected durable goods:				
Purchases planned, 1946.....	25.7-31.3	11.8-14.4	320	3.8-4.6
Actual purchases, 1946.....	28.3	13.1	310	4.1
Purchases planned, 1947.....	18.1-23.8	8.4-11.0	310	2.6-3.4
Houses (nonfarm):				
Purchases planned, 1946.....	7.5-9.3	3.1-3.9	5,020	15.6-19.3
Actual purchases, 1946.....	6.5	2.7	5,390**	14.5
Purchases planned, 1947.....	5.0-7.5	2.1-3.2	6,310	13.3-20.2

* Not available. ** Rough estimate.

survey didn't try to measure currency holdings because few people will admit to a stranger that they have cash in the house.) Some two-fifths of the spending units increased their holdings. About the same number showed a drop. But the average increases were bigger than the average reductions.

- The spending units that showed a drop in liquid assets drew about \$10-billion out of their past savings in 1946. Roughly 40% of this was used for general living expenses and emergencies. About 20% each went for buying consumer durable goods, for housing, and for investment in nonliquid assets.

- Spending units in the \$2,000-\$5,000 annual-income bracket accounted for more than half of the amounts spent for durable goods and housing in 1946.

- To pay for 1946 purchases of durable consumer goods, consumers borrowed about one-fifth of the cost, drew on savings for one-third, and made up the rest out of trade-in allowances and current income. This leaves a huge pool of potential consumer credit still untouched (BW—Jun. 7 '47, p22).

- During 1946, consumers were unable to buy as many new cars as they had expected (table, page 16). Many, especially in the lower income brackets, turned to the used-car market. This year consumers again are hoping to buy more new cars than probably can be turned out.

- In other durable goods, the situation is reversed. Consumers bought about what they had planned in 1946. They are budgeting considerably less for these lines in 1947.

- Demand for housing reflects the pressure of higher prices, especially on the

low income groups. Consumers spent less than they had expected in 1946; they seem to be planning to spend still less in 1947. Those who say flatly that they will not buy a house have increased from 83% to 89% of the total.

- **Asset Distribution**—The 1946 survey showed that the top 10% of the spending units at that time held 60% of the liquid assets, while the bottom 50% held only 3%. Preliminary results from this year's study suggest that the trend toward concentration of the liquid assets in a comparatively few hands continued during 1946.

Most of the spending units that dug into savings in 1946 were in the lower income brackets. And most of those that increased savings were in upper income levels. Here is how the changes in liquid asset holdings in 1946 stacked up by income groups:

	% Showing Increase	% Showing Decrease
Under \$1,000....	27%	46%
\$1,000 to \$2,999..	35	45
\$3,000 to \$4,999..	43	41
\$5,000 and over..	46	33

The top-bracket income earners are not always the big liquid-asset holders, of course. But the correspondence is close. Apparently, the small holders of liquid assets are running through their hoards at a fairly rapid clip; the habitual savers still are building up their holdings.

PRICE MOVES OF THE WEEK

There were several price changes in finished products this week of interest to businessmen. Among the decreases:

In tires, U. S. Rubber Co. and Good-

year Tire & Rubber Co. met the challenge of the mail-order houses and their direct competitor, B. F. Goodrich Co. (BW—Jun. 7 '47, p21), by cutting prices on passenger car tires from 4% to 10½%.

In pens, Eversharp, Inc., cut prices on all of its ball-point models from 40% to 60%. The \$25 pen now sells for \$9.95; the \$6.95 model for \$3.95.

In food, National Dairy Products Corp. announced that wholesale prices on all Kraft salad products had been reduced to 16% to 17%. Principal reason was the sharp drop in the price of salad oils (BW—Jun. 7 '47, p44).

Among the increases:

In appliances, Frigidaire Division of General Motors Corp. boosted quotations about 4½% on refrigerators, a little less than 3% on electric ranges. Increase is the result principally of wage boosts.

Employment Shift

National job level is near peak, but soft spots begin to show up. USES survey shows labor surpluses in 22 cities.

Despite a general rise in employment, soft spots—relatively large labor surpluses—are showing up in at least 22 cities.

In addition, half of 80 areas surveyed by the U. S. Employment Service expect future labor requirements to drop. The main reasons: price uncertainties, cancellation of orders, drop in consumer demands, general business uncertainties, and material shortages.

- **Employment High**—That is the pin-point picture found by USES. Nationally, the U. S. Census Bureau finds employment at a near-peak level: 58,330,000 in May as against 56,700,000 in April. Of the 1,600,000 increase, half a million was in nonagricultural activities. Unemployment was down to 1,960,000. In April it had been 2,400,000.

Reports to USES indicated an employment decline of 100,000 in manufacturing. Hardest hit were soft goods like textiles and apparels, tobacco, leather, and rubber. And anticipated needs for additional workers in manufacturing were leveling off. The seasonal increase in construction employment hasn't come up to expectations.

- **Labor Surpluses**—USES expects spotty conditions, with surpluses in areas like Los Angeles, San Diego, Calif., and Portland, Ore., where war production has declined but displaced war workers stick.

Other cities, like Scranton, Pa., Wheeling, W. Va., and Fall River, Mass., hold little hope for immediate improvement; they are dominated by a

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the industry which has been unable
to absorb the available labor.

Robert C. Goodwin, director of
ES, feels that the national employ-
ment level will turn down as demand
for goods is satisfied and supply pipe-
lines are filled.

Affected Areas—The 22 areas having a
relatively large labor surplus are Mobile,
Ala.; Phoenix, Ariz.; Los Angeles, Sacra-
mento, San Bernardino, San Diego, San
Francisco, and Stockton, Calif.; Tampa, Fla.;
Savannah, Ga.; Terre Haute, Ind.;
Topeka, Kan.; Portland, Me.; Fall
River, Mass.; Portland, Ore.; Scranton
and Johnstown, Pa.; Charleston, S. C.;
Tacoma, Wash.; Charleston, Hunting-
ton, and Wheeling, W. Va.

In some of them, like Johnstown,
Pittsburgh, and Tacoma, unemploy-
ment is actually decreasing, but it's still
high with relation to the national aver-

The employment decline in Los
Angeles is attributed to the slackening
of food processing and a "general iner-
tia" among manufacturers of end prod-
ucts. Surpluses are reported in semi-
skilled and unskilled jobs. Also, cur-
tailed aircraft operations have released
craftsmen and design engineers. The sit-

uation in San Diego is pretty much the
same, with continued declines expected
in shipbuilding and repair.

Employment in Providence, R. I., is
still tobogganing (BW—May 17 '47, p. 22).
Although this city is so far not listed
among the 22 "problem areas," USES
found it skidding "with increased mo-
mentum during April." Trouble is pre-
dicted for Providence for a "prolonged
period."

Cooperation Pays

**Four subcontractors saw
their war business fading, joined
forces to make finished products
none could produce alone.**

Four Toledo companies can testify to
the truth of the old saw, "In union
there is strength."

The four—Great Lakes Stamping Co.,
Manufacturers Enameling Corp., To-
ledo Developing & Mfg. Co., and Taylor
Products Co.—all did well as subcontract-
ors during the war. With the coming
of peace, their customers—the prime

contractors—once more found them-
selves in a position to take care of most
of their own needs for parts and serv-
ices they formerly let out. Since the four
companies were not set up to turn out
finished consumer products, they faced
a bleak and unpromising future.

• **Cooperate!**—Then, about a year ago,
Arthur R. Pass, Toledo advertising man,
had an idea: Combine the talents and
facilities of the four companies, and
turn out finished consumer goods co-
operatively. He set up a new corpora-
tion, Toledo Guild Products, Inc., in
which the four companies took stock.
In return, Pass got a financial interest in
each of them.

Guild Products did a \$2-million busi-
ness last year, sees a \$4-million volume
in sight for 1947. And, although there is
nothing to stop the four companies from
taking on outside jobs, so far they have
been booked to capacity on Guild busi-
ness.

• **How It Works**—Here's how the co-
operative setup works: Pass and his staff
are responsible for finding consumer
products for the Guild to make. There
are two main qualifications: (1) The
product must be one on which each of
the four manufacturers can do approx-
imately an equal amount of work; (2)
they must be able to produce it at a cost
which will allow low-price volume sell-
ing.

After the product is chosen, the work
is parceled out among the manufactur-
ers. Each is a specialist in its field: Great
Lakes turns out the stamped parts;
Manufacturers Enameling does the
painting; Taylor Products makes the
"extras" that go onto or into the final
product; Toledo Developing & Mfg.
takes care of final assembly. Then Pass
takes over again: He is responsible for
the selling.

• **Products**—First Guild product was an
all-steel typewriter table, which retailed
for about \$6. They sold well; the Guild
says they compared in quality with tables
selling for as much as 15% more. Next
on the list were a number of toys, in-
cluding a tricycle, a scooter, and a
scooter-skate of which more than a mil-
lion were sold last year.

Other products include a line of
garden gadgets, a tricky new type of ash
tray, and five different models of small
tables. Soon to be added are a roll-away
cocktail table and more toys, including
a combination car-rocker-straight-chair
for infants. Every Guild product is of
all-metal construction.

• **Embarrassing Moment**—The tricycle
caused the Guild considerable embar-
rassment. None of the four manufactur-
ers made wheels; they were ordered from
a nonmember. The latter failed to de-
liver as promised; as a result scores of
Christmas orders for tricycles had to be
canceled. One of the manufacturers is
now equipped to make wheels.



SUGAR PROBLEM IS NOW INDUSTRIAL

In the midst of the current Washington argument over sugar regulations,
Agriculture Sec. Anderson this week lifted rationing of the commodity
for household use. Cuba's bumper crop brought the issue to a head. But
industrial users' supplies were left under controls. How long they will last
was a question still being studied at conferences such as this one of, right
to left: Sec. Anderson; Ralph Flanders, head of the Senate subcommit-
tee on sugar; a big industrial consumer, Pepsi-Cola's Walter S. Mack, Jr.

FRESHMAN IVES IS SENATE'S LABOR EXPERT

The voice of Irving M. Ives can be heard distinctly in the farthest corners of the United States Senate chamber, despite the room's notoriously poor acoustics.

And the impact of what he says there seems destined to influence labor-management relations in the farthest corners of the nation.

For Ives has developed into the key man in Congress' first—and maybe last—major revision of the federal labor laws in more than a decade.

• **Editor**—In five months the freshman senator from New York has made his mark. It is stamped indelibly on the labor disputes act which Congress has sent to the President.

The bill carries the names of the Labor Committee chairmen—Rep. Fred A. Hartley of New Jersey and Sen. Robert A. Taft of Ohio. But, if they are its authors, Ives has been its editor.

• **Study**—Who is this newcomer who moved so swiftly into congressional leadership in the intricate field of labor legislation? He is an upstate New York banker and insurance man who frankly admits that he knew absolutely nothing about labor ten years ago. But he began an intensive study of the subject about that time. And, he confesses, he is still learning.

Ives' education in labor-management problems began early in 1938 when the New York State Legislature set up a Joint Legislative Committee on Industrial & Labor Conditions.

• **Chairman**—Ives, the Republican leader in the State Assembly, was chosen chairman of the triparty (Republican, Democrat, and American Labor) committee. Its job was to see what could be done to bring about better relations between employers and employees.

The committee achieved memorable successes. Its work resulted in substantial revision of the State Labor Relations Act, establishment of a school of industrial and labor relations at Cornell University (for which Ives was chosen dean), and creation of the New York State Dept. of Commerce.

Ives was floor manager in the Assembly for the legislation growing out of the committee's studies. He also found time to push through a state law prohibiting discrimination in employment at about the time Congress was killing off the Fair Employment Practice Committee.

• **Conflicting Opinions**—It doesn't bother Ives that some segments of

management think he is too far to the left and some elements of labor believe he is too far to the right.

To both of them, Ives would say: "Labor unions, to be a force in our economic system, must be responsible. Measures to destroy or weaken them will not contribute to such responsibility."

He sticks to—and is willing to fight for—his creed that there is a middle ground where labor and management can meet for their mutual benefit and the betterment of society as a whole.

His adversaries concede that in the fight he will be fair and reasonable. His goal will be to convince his opponents by logic rather than to seek a weak-kneed solution through compromise. His test is always: Will it work?

• **The Next Six Years**—What about his future? It seems inextricably tied to the course of any other labor and social-welfare legislation which comes before the Senate in the next six years.

The Taft-Hartley bill contains a provision for setting up a special committee to continue studying labor-management relations. Even if Ives' freshman status keeps him from being chairman of such a committee, his reputation as a labor expert will

make it impossible to deny him a membership. It will also assure that wherever he sits will be the head of the table.

The Senate Labor Committee, of which he is a member, also has jurisdiction over subjects allied to labor relations—such as the federal wage-and-hour law, social security legislation, and public health and welfare. Ives also is a member of a special Senate committee on the problems of small business.

Meanwhile, the Senate Judiciary Committee has begun hearings on an antidiscrimination bill he has introduced patterned after the New York State law he authored (BW-Apr. 5 '47, p104).

• **Dewey's Man?**—Politically, a lot has been said about Ives being "Dewey's man" in the Senate. He isn't, completely. Ives is behind New York Gov. Thomas E. Dewey for the presidential nomination in 1948. But he doesn't ask or receive voting instructions from Albany. He votes his own convictions, regardless of whether they match or conflict with the views of the New York governor or of Taft, boss of the Senate Republicans. About nine times out of ten, those convictions will align him with his party majority on the roll calls.



The Ives team (left to right): the Senator; Dwyer Shugrue, his counselor; and William B. Groat, his administrative assistant and long-time coworker.

Rent Control to Taper Off

Legislation creates local boards that can raise ceilings, decontrol. Landlords can seek 15% boost. If tenant refuses, cannot be evicted now, but takes chance on future.

Congress is dismantling rent control, the most durable and perhaps the most effective of the great wartime regulatory systems that once reached every corner of the U. S. citizen's life.

The Beginning of the End—Through the two postwar years, rent control held solid. But the extension legislation that Congress is now completing is designed to start a tapering-off process. By next March it will throw tenants on their own. A conference commenced this week reached a compromise House and Senate versions of a bill is expected to reach President Truman next week. He probably won't sign it, figuring that the diluted compromise is better than none (BW—Jun. 7, 1947).

These are the legislation's key provisions:

Local boards in any area may eliminate or increase residential rent ceilings whenever they wish (federal rent control has never applied to commercial properties).

Landlords may take over the rent control job from the federal government whenever they wish.

New construction and newly rented units are exempt from rent control.

Individual tenants and landlords may contract themselves out from under rent control. Under such a contract, the tenant gets a lease running to the end of 1948 at a rent that can be not more than 15% above the September, 1946, level.

Veteran Housing Out—Another title of the same legislation practically wipes out the last remnants of the post-war veterans housing program—already well demolished by executive action at the turn of the year.

Eliminated are the 2,000-sq. ft. limitation on house size, the controls over building materials, the premium plans for material producers, the priority aid equipment for producers, the guaranteed market programs for prefabricators. All that would be left of the dramatic program whipped up by Wilson Wyatt more than a year ago are: (1) a requirement that new housing be held 30 days for sale to veterans; (2) a requirement for federal permission to erect recreation and amusement structures.

This latter provision was one of the points in dispute. The House

measure prevailed. The Senate version's language was interpreted as requiring a permit from the federal government for all non-housing construction except exposition buildings.

• **Popular Support**—Rent control is the one price regulation which has had enough popular support to ride out the decontrol wave of the past year. After the war, with housing short even in remote villages, few areas were decontrolled. Indeed, the rush of veterans to the university towns generated new scarcities, resulted in expansion of rent control to previously uncontrolled places.

At the peak, last November, OPA's rent-controlled areas accounted for about 110 million people. Nearly 15-million living units were under rent ceilings.

Since then some rural and suburban areas have been decontrolled. No major cities have been cut loose, and more than 14 million units are still under the lid.

There have been administrative changes. When OPA died early this year, its Rent Division became the

Office of Rent Control under the short-lived Office of Temporary Controls. A month ago OTC was disbanded and ORC was put under the Housing Expediter. ORC Administrator Carson went over to War Assets Administration, and Tighe Wood, a veteran rent-controller from the Chicago area, became chief.

But through all these changes the organization has held together. Even in the field offices there's been no tendency for the staff to drift away. And there's been little relaxation of the rigid ceilings. In recent months, ORC has periodically publicized "liberalizations" of appeal provisions for individual rent increases. But the overall effect of some 40,000 increases has been negligible. Through the sky-climbing inflation since last June, the Bureau of Labor Statistics' rent index has risen only about 0.5%.

• **Artful Dodge**—Popular feeling is still so strong that congressmen, under heavy pressure from real estate and builder interests, resorted to a compromise formula. It is rather artfully designed to insure that no responsibility for any specific rent increase could be hung on Congress.

In each rent area, a board of local citizens is to be appointed from names submitted by state governors. The board will pass on appeals for individual adjustments, may grant across-the-board increases, may decontrol the area entirely. Technically, board decisions are



PACKAGED LUMBER AIMED AT COST CUTTING

Another industry—lumber—may be moving into the modern packaging orbit. Chicago's Acme Steel Co. is suggesting its steel strapping to bind lumber into unit bundles (above) for quick loading and unloading, to cut shipping damage. Acme also envisions that lumbermen someday will sort and grade their products into "prepackaged" units. Marketing and distribution costs might be reduced from 20% to 50%, Acme reports.

subject to federal approval. But the Senate committee has made clear to Housing Expediter Creedon that it intends all recommendations to be approved unless they are clearly capricious.

Any state that wants to take over the burden of rent control may do so by passing its own rent law. The law must affirmatively state that it's a substitute for federal regulation—so existing laws such as New York's and New Jersey's do not automatically come into effect.

Least clear in its effect is a provision permitting landlords and tenants to enter into leases at rentals up to 15% above those in effect last September—provided the leases run to the end of next year.

• **Gamble**—Theoretically, no tenant is under any compulsion to agree to the deal. But in tight areas most tenants, presumably, will take a lease and a 15% boost. The alternative would be to risk eviction or a much larger rent hike when rent control ends. If he does refuse, the tenant cannot be evicted under the present legislation except for cause—or unless his local board decontrols the area.

However, the general eviction procedure is streamlined. The four- to six-month grace period is eliminated. So are rules intended to insure that sales resulting in evictions are bona fide.

But some tenants, of course, still may not agree to a 15% boost and a lease. They'll be gambling that rent control will be extended next year by state or federal action.

Music in the Air

Instrument makers start a promotion campaign to get their business back to level of '20's. Best markets: schools, homes.

In the mid-1920's, the musical instrument industry was playing the sweetest tune in its history. Business was at its peak, and prospects for the future were bright. But when the depression hit, this symphony was suddenly filled with sour notes. Business plummeted, and stayed low. Then came the biggest discord of all—the war. The music instrument industry virtually had to shut down.

• **Tune-Up**—Last week the National Assn. of Music Merchants convened in Chicago to figure out how they could best get tuned up to their old pitch. Their decision: that by intensive promotion and market research, instrument sales might be boosted back to the levels they hit in the '20's. So they voted to raise between \$250,000 and \$400,000 from among their members to carry through a hard-headed promotion program. Its major objectives:

- To do market research to learn why people do or don't buy musical instruments.
- To push for free musical education in all public schools as part of the regular course of study. This, the music merchants figure, will turn many

listeners into players of instruments.

- To make music teaching more attractive by plugging for higher and improved teaching techniques such as visual education.

- To promote more and bigger festivals, publicize musical accomplishments of movie stars, sports heroes so on.

- To organize industrial band orchestras much as present industrial bowling and athletic programs are organized.

- **Best Markets**—Music merchants regard the home market as their bet, hope to sell some musical instrument into a million homes a year. The reason for their emphasis on educational fields is that they see school bands and orchestras as a second best market.

Biggest drawback to early achievement of their goal is high prices, averaging 35% above prewar. There is a continued shortage of cost beginners' instruments, due mainly to manufacturers' concentration on more expensive lines.

Instrument makers see little chance of lower prices soon. Production requires proportionately more direct labor than for any other durable goods. They are necessarily limited in the amount of labor-saving equipment that can be used. And in some parts of the industry labor costs are up as much as 80%.

- **Backbone**—The best barometer judging the success of the new promotion campaign will be pianos. They are still the backbone of the instrument business, account for 50% of annual sales. Last year piano makers harassed by materials and manufacturing shortages, turned out only 50% of their prewar production of 150,000. Since 1935, spinets have completely replaced the old uprights as the instrument for today's small home. They now make up 90% of the industry's aggregate output (BW—June, p92).

With their instrument's importance in mind, piano makers put their models on display at the Chicago Music Show. Most of those shown feature better case designs than prewar. They will range in price from \$485 to \$1,200.

- **From 88 to 64**—Newest design is a miniature piano with only 64 keys (picture) instead of the standard 88. Designed by Pratt, Read & Co., makers of piano keys and actions, it weighs only 80 lb. Its legs can be removed and the instrument carried like a suitcase. A second set of shorter legs can be put on to make it the right height for children. The piano is aimed to fill the demand for a low-priced beginner's piano and will retail at about \$300.



A small piano for small people and places keynotes a big music sales drive.

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That's how enthusiastic manufactur
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market for latex foam rubber. They

in this amazing material the possi
ilities for millions of dollars in new
products. For the general public, this

enthusiasm may mean a new era of
curious comfort within the reach of
everyone.

Bottlenecks—But generally speaking,
that era is still a long way off. Three
bottlenecks are still holding back the

am latex industry: (1) lack of produc
on in the Far East; (2) the need for
ore equipment at bulking and shipping

installations; and (3) price.
Of these, the most immediately press
ing is the first. This year, the total sup
ply is far below potential demand.

But even if supplies were greater,
probably no more latex could be han
dled now. The process of moving liquid

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is usually shipped in completely dry,
smoked sheets. Latex, on the other
hand, is about 40% water when shipped,



giant beater whips liquid latex into a batter. Lucious as whipped cream, it is poured into molds. End product . . .

Foam Rubber for Everyone

Liquid latex still in short supply—and expensive. But both scientists and manufacturers see unlimited uses in future. Greatest need: a cheap, high-quality synthetic to replace natural product.

Industry is nearing the greatest single expansion in the use of rubber since the advent of the tire.

That's how enthusiastic manufacturers and scientists are over the potential market for latex foam rubber. They see in this amazing material the possibilities for millions of dollars in new products. For the general public, this enthusiasm may mean a new era of curious comfort within the reach of everyone.

Bottlenecks—But generally speaking, that era is still a long way off. Three bottlenecks are still holding back the latex industry: (1) lack of production in the Far East; (2) the need for more equipment at bulking and shipping installations; and (3) price.

Of these, the most immediately pressing is the first. This year, the total supply is far below potential demand.

But even if supplies were greater, probably no more latex could be handled now. The process of moving liquid rubber to this country requires tank trucks, tank cars, storage tanks, compressors, and so on. Most of these facilities were lost during the war.

Price Deterrent—The prewar price of latex was too high to permit its use on a broad scale. The main reason: Rubber is usually shipped in completely dry, smoked sheets. Latex, on the other hand, is about 40% water when shipped,

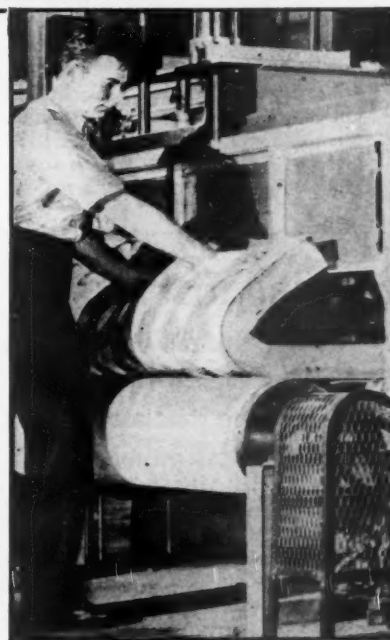
making it more expensive to handle.

Because of this, manufacturers realize that natural latex will probably always bring from 5¢ to 8¢ more per pound than the best grade of smoked sheet rubber. Thus the search for an improved and less expensive synthetic latex is more intense now than ever before.

• **Whipped Cream**—Responsible for developing foam latex, one of the great prewar advances in the field of rubber, was the Dunlop Rubber Co. of England. It is made somewhat like whipped cream—by beating liquid latex with a giant "egg beater." Air bubbles "frozen" into the mixture make it fluffy but sturdy. The more it is beaten, the lighter it gets. The end product—foam rubber—keeps its resiliency much longer than its older rival, sponge rubber. (Sponge rubber is made from dry sheets, kneaded on rollers. Chemicals are added to generate gas that creates tiny holes.)

Foam latex was just beginning to find its way into the home when the war cut off supplies of natural rubber. It was used chiefly in expensive mattresses, theater seats, buses and Pullmans, and in aircraft and automobile upholstery (BW—Oct. 29 '38, p21).

• **Foam Unlimited**—Despite the present obstacles, manufacturers regard the future possibilities of foam rubber as almost limitless. They have already thought of thousands of uses for it



. . . emerges from electronic oven.

everywhere from the home to industry as padding or cushioning.

As a result, there is intense activity behind the scenes in industry. Not wanting to wait for a synthetic, manufacturers are trying to trim costs by improving production techniques of natural latex. Firestone, one of the six U. S. firms licensed by Dunlop to use the latex process, has been working on electronic vulcanization. The other five licensees—Goodyear Tire & Rubber Co., B. F. Goodrich Co., U. S. Rubber Co., Dunlop Tire & Rubber Co., and Hewitt-Robins, Inc.—are known to be working on similar processes.

Air Travel Soars in the Islands

The year 1947 has been a stormy one for many a U. S. airline. But in Hawaii the sun shines brighter than ever on aviation. There, the airplane has just about driven the steamship out of the passenger business.

• **The Winner**—Stimulated by the rising passenger traffic on transoceanic planes (right), Hawaiian Airlines, Ltd., put on the pressure last year. With sole certification for scheduled interisland passenger service, it counted 252,206 fares last year.

Inter-Island Steam Navigation Co., Ltd., only other common carrier linking the six main islands, carried just 47,097. And the trend's continuing; in 1947's first quarter, the airline carried 89,617 persons, the steamship line carried fewer than 4,000.

Speed, good safety records, few canceled flights are factors influencing the growth of Hawaiian air travel. So are ship and plane fares; they're the same.

• **No Loser**—The steamship line is not exactly a loser. Its freight volume is substantial and so are rates. A 50% increase was granted last January; higher wages may result in a request

for another boost. There are plans afoot to replace island ships with barges and freighters.

And Inter-Island also controls the airline.



Hawaiian Hopes

Islands are anticipating real benefits for their own and U. S. business when statehood makes trading practices easier.

Businessmen are glancing fondly over the palm-fringed islands of Hawaii with more than exotic scenery in their mind's eye. For Hawaiian statehood, now a foregone conclusion, augurs well for U. S. business.

Before the war disrupted commerce, the territory of Hawaii ranked as the fifth best customer of the continental U. S., standing behind Great Britain, Canada, France, and Japan. Trade with the mainland normally totals \$250 million a year. But according to supporters of the statehood movement, this is only a part of the potential total as a full-fledged member of the union.

• **Retarded Development**—Supporters contend that the territory's indeterminate status has retarded its economic development, and to some extent the development of the U. S. mainland's West Coast as well.

The underlying reason is that under the territorial form of government, Hawaii does not have full control of its

own political and economic destinies. The net result has been a certain amount of hesitancy on the part of business and industry to expand in the territory.

Second important reason for the islands' slow economic development has been lack of knowledge concerning export and import restrictions. Although these are few, the stateside businessman contemplating shipment to or from the islands imagined reels of red tape.

• **Hopes and Plans**—With misunderstanding and misapprehension wiped out through statehood, Hawaii expects an influx of industry and trade. Gimbel Brothers, Inc., New York department store, has announced plans for opening a branch in the islands. Branch stores already maintained in the islands by Sears, Roebuck & Co. and S. H. Kress & Co. have done well, and word of their success is getting around.

Hawaii has also mapped out an extensive postwar construction and improvement program. According to a Chamber of Commerce survey, private business is planning a \$113,150,000 construction program within the next two or three years. This includes \$60 million for new homes and apartments, and \$22 million for the sugar and pineapple industries.

Public projects scheduled for the conversion period will cost a minimum of \$60 million, including \$6,330,000 for

harbor improvements, and \$11 million for roads and highways.

• **Industry Will Profit**—Such a program will bring in heavy shipments of building materials and equipment from the mainland, thus benefiting West Coast shippers and jobbers. A prospective increase during the next few years in the islands' present population of 519,000 will carry forward this demand for construction materials and general durable merchandise.

Although the islands have complained in the past of high shipping costs, increased interstate commerce and enactment of their own state transportation laws should better this situation.

• **Leis Are Big Business**—The sugar industry, Hawaii's economic backbone and pineapples, the No. 2 industry, will not be greatly affected by statehood. But the territory is looking forward to a big increase in its No. 3 industry—the tourist trade.

But in addition to the three big industries, there are 36,875 firms and individuals engaged in more than 54,000 different lines of endeavor.

• **Good Pay**—All told, these "mine" industries paid \$380 million in wages in 1945. The island agricultural workers are the world's best paid, according to the Hawaiian Sugar Planters Assn. statistics show that the earnings of the average unskilled male plantation worker exceed \$2,200 annually. The stateside brother of the Hawaiian worker receives an average of \$1,700 annually.

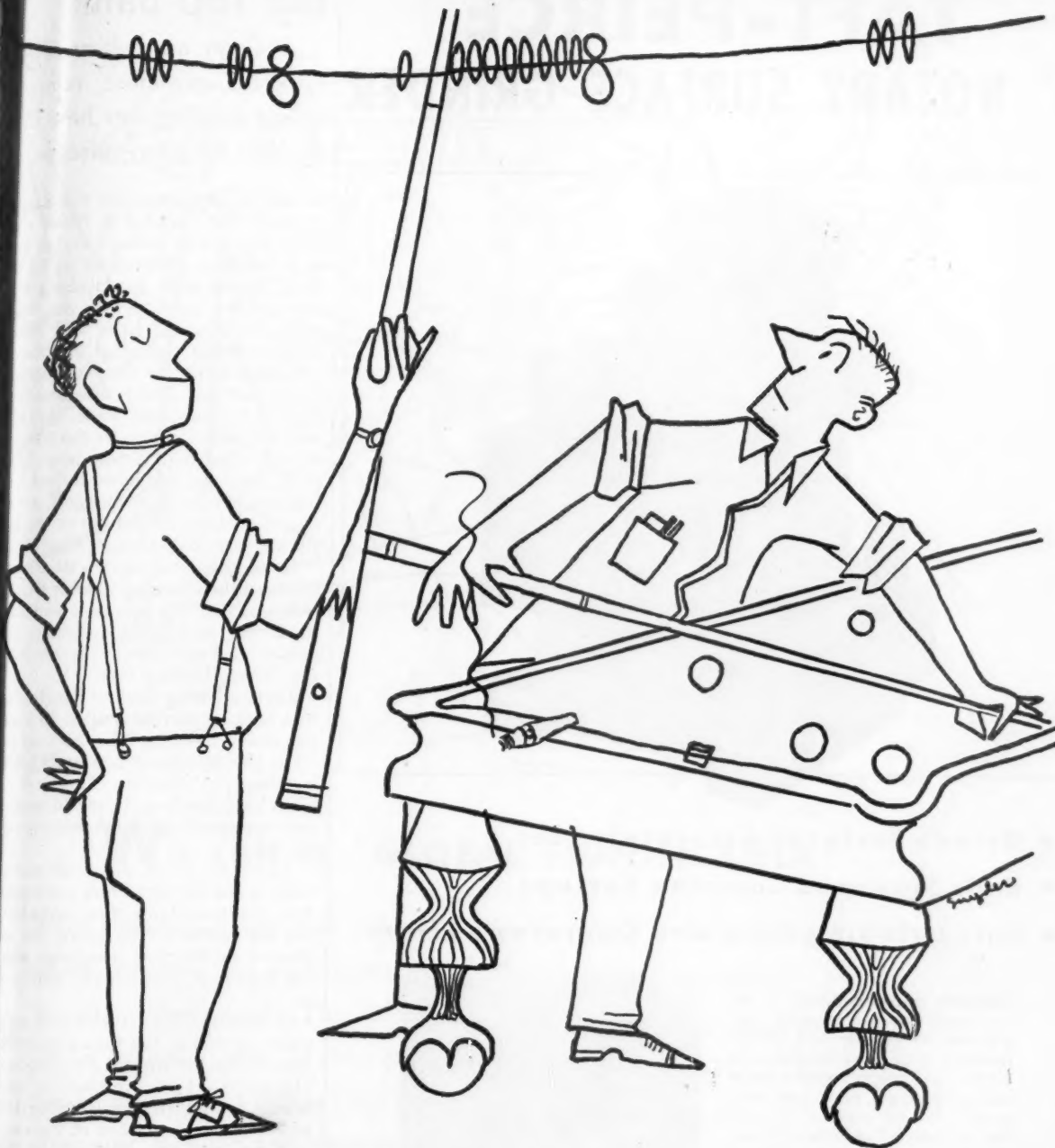
But businessmen are aware that the high wages are the result of strong organizing on the part of the left-wing International Longshoremen's & Warehousemen's Union (C.I.O.). They contemplate with apprehension the left-wing strength in the legislature (BW May 10 '47, p82)—backed by the union which has long since moved from the waterfront into the fields.

• **In Terms of Support**—On the revenue ledger, statehood will mean little to the federal government. The islands already bear the financial responsibilities of state, and have since 1900. Their 1946 internal revenue contribution was \$17 million, much larger than many states.

Territorial finances are in sound condition. The budget is balanced, and the bonded indebtedness has been reduced from \$28,511,000 in 1939 to about \$5 million.

Statehood will cost the federal government no more than at present for such federal assistance programs as agriculture, social security, and public health. The territory now shares in these benefits equally with the states.

About the only financial change will be the \$150,000 which the Treasury Dept. disburses annually for salaries of the territorial governor, legislators, and certain judges. As a state, Hawaii will assume these costs itself.



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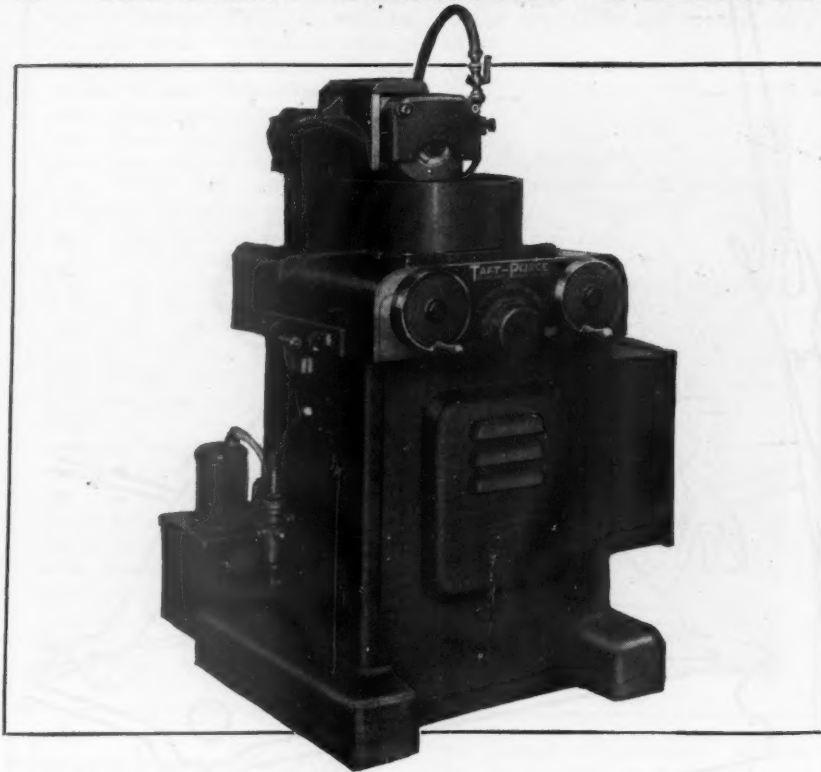
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Big Top Battle

Court ousts James Haley as circus president, reinstates Robert Ringling, sets June 20 as the date for a new election.

The old-timers around the Ringling Brothers and Barnum & Bailey circus know that not all of the Greatest Show on Earth takes place under its big top. Some of the most spectacular acts are the amazing acrobatics—in and out of court—by Ringling heirs and officers.

• **Overturn**—In the latest of these scheduled turns, the Delaware Supreme Court has just jerked the president's chair out from under James A. Haley, who has been top man in the circus for a little more than a year now. In his place, the court reinstated Robert Ringling, son of one of the founders, and the man that Haley heaved out of the same job last year (BW—Apr. 20 '46, p. 18).

In addition, the court's decision validated the elections of John Ringling North as first vice-president and James R. Griffin as secretary-treasurer. Both have teamed with Haley in recent battles within the Ringling clan.

• **Election Called**—Robert Ringling's turn booking may be limited to a season or two weeks, however. The court set June 20 as the date for a new stockholders' meeting and election. This will give Haley and North a chance to make an early comeback—provided they can swing the votes.

There are 1,000 shares of common stock in the Big Show now outstanding. They are divided into three main blocks, but the mechanics of voting are complicated by Ringling genealogy and the legacy of older feuds within the family.

• **Ownership**—Mrs. Charles Ringling, widow of one of the founding brothers and mother of Robert Ringling, owns 315 shares—31½%. Another 315 shares belong to Mrs. Aubrey Ringling Haley, widow of the son of one of the original brothers, and now the wife of James Haley.

John Ringling North is the son of a Ringling, a sister of the famous brother. He owns only 7% of the stock himself, but he controls the remaining 300 shares as executor of the estate of his uncle, Old John Ringling. Old John, the patriarch of the brothers and once the undisputed king of the circus world, died in 1926. He left his property, including the circus stock, to the state of Florida, but the affairs were so tangled that the transfer of the shares has not yet been completed.

• **Story of a Feud**—It was John Ringling North who made peace with the bankers and put a new, streamlined circus



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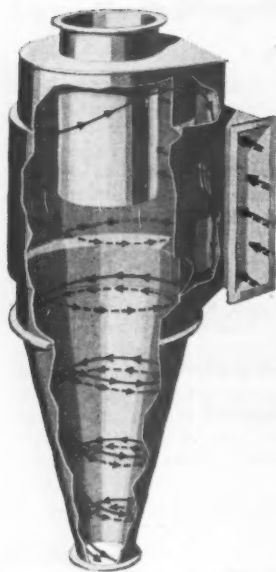
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on the road again in 1938. He show, as president, from 1938 to

At the end of the 1942 season family feuding broke out into warfare. "The women"—Mrs. Ringling and Mrs. Aubrey Ringling (who married Haley the following year)—didn't like elephants with painted nails or the dream creations of Sam Bel Geddes. They voted John Ringling North out of a job and put in Ringling (son of Mrs. Charles Ringling) as president.

• **Pact**—At the same time, they signed a binding agreement to vote the same way in future elections. The agreement was to run until 1950, specified that if, at any time, the women could not agree on how to choose an arbiter (Karl Loos, a Washington attorney) should make the decision.

Two seasons later came the Hartford fire. James Haley, then president, took most of the blame and served eight months in prison on a charge of involuntary manslaughter.

• **Judgment**—The circus came out of a \$4-million court judgment hanging over it. Each year since then, all of its profits, except what it needed to start the season, have been applied on the bond for claims.

When Haley finished the prison term, he and John Ringling North formed

WIPES, LIGHTS, RINGS



Necessity is the mother of invention—or is it? Some of the latest crop of gadgets cast doubt on the accuracy of the old truism.

• For example, there is Frank Carnahan's automatic door cleaner (above). It scrubs your shoes, rings the doorbell—can even turn on the porch light.

Carnahan, who operates a New Philadelphia (Ohio) mushroom factory, reports that a Cleveland concern is interested. Oh yes, the mat can also be equipped with heating elements.

THE DOOR IS OPEN

Today's most widely used vacuum cleaner is a product of The Hoover Company. Such leadership has not been attained overnight — it is the result of 39 years of planned effort. . . . In its financial planning The Hoover Company has utilized the facilities of Smith, Barney & Co. for underwriting and distributing securities to the advantage of the company and its security holders.

The door has never closed on Hoover

Most of us have heard of the "open door" policy in the relationship of nations, but we hardly associate it with the vacuum cleaner salesman. Yet, the success of The Hoover Company is proof that the American housewife's door has been open to them since 1908.

In that year W. H. Hoover commenced production of the Hoover vacuum cleaner in Ohio. In the first full year of operation, exactly 2,382 of his cleaners were sold. Doors continued to open. By the 1920s sales had risen above the quarter million mark—and continuing growth was maintained until World War II interrupted.

To meet today's increased demand for the company's products requires capacity operation of plants in Ohio, New Jersey, Canada, England, Scotland, thus creating thousands of jobs. By lightening the daily work of millions of housewives, the growth of Hoover has made important contributions to the nation's standard of living. All this is the result of wise, conservative, forward-looking planning by the Hoover management.

An implement of growth

That planning extended as a matter of course to sound financing policy. Hence, when the company desired in 1943 to review its financial plans, it used the facilities of Smith, Barney & Co. in association with another invest-

ment firm. Working closely with the management a three-part plan was recommended. First, to simplify the capital structure two classes of outstanding common stock were replaced by a single issue of common stock. In view of the prevailing favorable money market, and in order to effect an improvement in the earnings position of the common stock the then outstanding preferred shares were exchanged for a new class of preferred stock bearing a lower dividend rate. At the same time arrangements were made for public distribution of part of the preferred and common shares owned by the Hoover family.

This broader distribution of Hoover securities afforded an outlet for the investment of savings and brought to the company the advantages accruing from a personal interest on the part of the public—the ultimate purchaser of industry's production.

An open door for you

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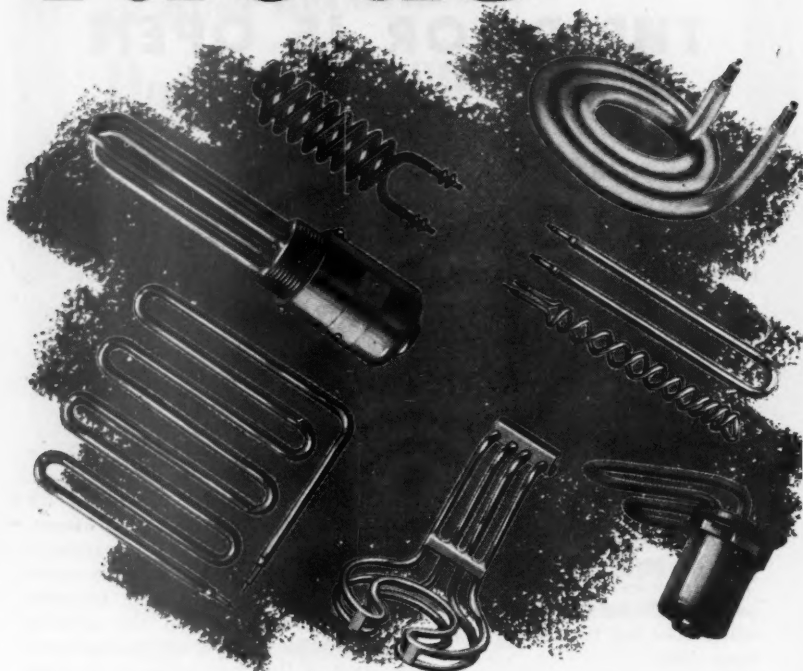
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alliance, aimed at Robert Ringling stockholders meeting in April, they heaved Ringling out of the management and took over control themselves.

• **Violation Charged**—Ringling was charged that the election was illegal on the ground that Haley had voted his wife's stock in violation of the old agreement with Ringling's mother. He went to court with the charge, and started the case that the Delaware Supreme Court has just decided in his favor.

All this seems to set the stage for new and even more spectacular displays of fireworks at the stockholders meeting on June 20. But the performance might prove a dud. There is a chance that the Ringlings will patch things up—at least publicly—at the interval. If they don't, arbitrator Lord is expected to vote the two blocks for his control in the way that will be most soothing to all sides.

• **Out of Debt?**—Meanwhile, the Show is in the midst of what promises to be the greatest year in its history. The opening session in New York set all records. Circus men say that any luck at all it should be able to pay off the last of the Hartford judgments this year.

AIR CARGO RATE CUT

Air freight is taking an increasingly important place in the thinking of major airline executives. It is less than three years old—American Airlines was the first to inaugurate service, on Jan. 15, 1944 (BW—Dec. 17 '45, p. 19). William A. Patterson, president of United Air Lines, predicted last year that cargo business would equal passenger business as a revenue-producing item "when we get the cargo rate down to 9¢ a ton-mile."

There's no telling when that will be, of course. Within the last year both American and United have announced rate cuts of from 20% to 30%. But even so, the average on shipments less than 8 tons is still 20¢ a ton-mile. Lowest rate is on full 8-ton DC-4 loads—14¢ a ton-mile.

Chief factor behind the present increase is increased economy of operation of DC-4's over DC-3's; as more and more of the larger planes become available for cargo use, further cuts are probable. But it is probable that both United and American had in the backs of their minds the threat of increased competition from the independent cargo lines that have just been given common carrier status by the Civil Aeronautics Board (BW—Jun. 7 '47, p. 43). A move in this direction was given last week by Harold Crary, vice-president of United. He said he thought the company's new rate schedule would attract a substantial volume of traffic away from charter services.

Why So Many Mistakes?

No matter how perfect a machine is made, its operator is bound to make errors. Studies are being made at Johns Hopkins University to try to find ways of minimizing this human element.

Modern machines are often too complicated, too precise for the men who must operate them.

That complaint is nearly as old as the machine age itself. It has usually been met by increased training of workers, by the careful selection of operators, by incorporating changes that develop enough practical operating experience. **New Approach**—Now Johns Hopkins University is making a new approach, one that it calls "human engineering." The work is being done under contract with the Navy Dept.'s Office of Research & Invention. Studies are being conducted on the university campus at Baltimore, Md., and in a field laboratory at Jamestown, R. I.

Primary purpose is to study the behavior of normal persons among common equipment, then attempt to fit the machines to the men. The experiments involve physical, psychological, time-motion studies. Many findings are expected to have industrial application. **Results So Far**—Even in its early stages, the study is producing interesting information for machine designers

and users. For example, the most crankable crank, the most readable gage, the most recognizable knobs.

Here are some of the preliminary findings:

Cranks. The scientists have found that a man can turn a crank having a 2-in. radius at speeds up to 300 r.p.m. If the radius is increased to 7 in., he can achieve only 150 r.p.m. If the drag is increased, the turning rate of the smaller crank is reduced considerably, while the turning rate of the larger crank is little affected.

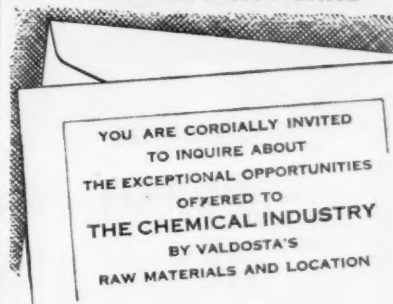
The human "guinea pigs" registered about the same results whether turning cranks clockwise or counterclockwise. In tests of right-hand and left-hand performance, best results were obtained when the individual was using the preferred hand.

Gages. Researchers have found that counter-type indicators can be read in half the time it takes to read a conventional pointer-type gage. And readings are made with fewer errors.

Knobs. This study is designed to reduce error in handling controls. It cov-



to establish visibility limits for operators of duplex control machines, Johns Hopkins has developed this experimental unit. A light moves on a toy train track behind the railing. While staring at a fixed point ahead, operator tries to move light to specified positions at one side. Results show how accurately he has gaged distance, position, and speed of the moving light.



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ers size, shape, and spacing of controls. Attacking size first, the Johns Hopkins experimenters arranged a rack of wooden knobs from $\frac{1}{4}$ in. to 5 in. in diameter. A blindfolded "guinea pig" then was asked to select two knobs that felt the same size, to pick one knob half as big as another, to pick one a fourth as big.

The experiments, while still incomplete, show that it is easier to judge sizes for knobs 2 in. or more in diameter than for those under 2 in.

Oral research. Everybody knows that to err is human—and this goes double when it involves telephone conversations. Using two-man teams, the experimenters studied the frequency of such errors. One man on the team reads 10-digit numbers over the phone to his partner.

In 84 experiments, it was found that the average error was less than 2% when the numbers were transmitted at a rate of 10 numbers per min. When the speed of reading was increased, errors rose sharply.

Dr. Clifford T. Morgan, project head, and his associates feel that this type data will be useful to such concerns as makers of stenographic machines and recorders.

• **Other Studies**—The Johns Hopkins group is also studying auditory signaling systems, to determine whether and how sound can be employed to convey information to machine operators.

Another study is concerned with visual research—can a man watching one operation or gage oversee other operations or gages not in his direct line of vision?

• **Variety in Research**—The "human engineering" project is but one of a number of technical studies which Johns Hopkins researchers are conducting—many for industry or having industrial applications. Among such projects:

- Development of a coal-burning gas-turbine locomotive for Bituminous Coal Research, Inc. (BW—Sep. 7 '46, p58).
- Tests on various laminated plastics to determine such factors as strength, resilience, durability. This is a continuing study sponsored by National Electrical Manufacturers Assn.
- Development of efficient methods for analyzing the composition of alloys. A government-sponsored project during the war, it is now backed by Leeds & Northrup Co.

ASK L.C.L. RATE BOOSTS

Eastern railroads are going ahead with their plans to raise less-than-carload freight rates—even though they know it will mean losing some of their traffic to trucks.

The eastern roads have just petitioned the Interstate Commerce Commission for permission to file a new set of l.c.l. rates. Shippers estimate that the boosts

would range from about 20% to 100%. The roads have two main reasons for going ahead:

(1) They are not covering out-of-pocket costs on a considerable number of l.c.l. shipments at present rates.

(2) The roads are planning to petition ICC for a general freight rate increase later this year. They won't stand a chance if they can't prove that they have exhausted every other possibility.

ICC may take its time about approving the proposed l.c.l. hikes, but probably will give in eventually. It has indicated several times that it doesn't think l.c.l. traffic now bears its share of costs.

MOVIE CURB SERVICE

Neighborhood movie-house operators worried by the drop in business from the postwar peak, are willing to try anything to pep up attendance. Perhaps the oddest trick reported to date is being used by Denver's Mayan Theater.

To ease traffic congestion, the fathers recently decreed that parking in the area around the theater would be limited to one hour, up to 6 p.m. The hour isn't long enough to see a movie.

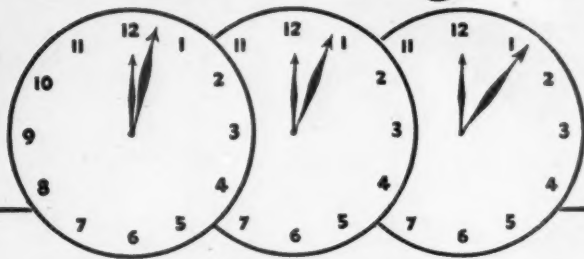
So the theater installed in its lobby a chart of all parking meters within a four-block radius. A matinee customer parks his car, comes to the theater, and the chart to show an usher where the car is, leaves a supply of nickels with the usher. Once every hour the usher goes out to drop a nickel in the meter.

CHASING RAINDROPS



A helicopter is game to try anything—even to chasing away rain. When an unseasonable storm deluged Santa Clara, Calif., and threatened to spoil a ripening cherry crop, the Army rushed a 'copter to the rescue. Whirling just at tree-top level, the rotary blades drove the water off, kept the cherries from splitting. One of the 50 growers affected said it looked as though a \$250,000 crop had been saved.

How to Cut Metal Cleaning Time to MINUTES



**NEW, FAST-ACTION DETERGENT CLEANS FERROUS
AND NON-FERROUS METALS... Easy to Handle**

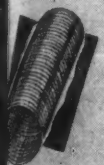
TYPICAL USES FOR Solvent "26"



CARBURETORS—Solvent "26" removes gum, gasoline sediment and other accumulations of dirt.



SPARK PLUGS—Solvent "26" safely cleans porcelain; helps loosen carbon deposits.



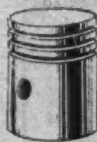
METAL PLATES AND SCREENS—Solvent "26" restores clear, clean finish to any metal surface.



DIES AND STAMPING—Solvent "26" removes drawing compounds from die-formed or stamped metal.



LABORATORY EQUIPMENT—Solvent "26" frees glass and metal tubing and their supports of gums, varnishes and other incrustations or deposits.



PISTONS—Removes lacquers, gums, resins, etc. from gas, gasoline and diesel engine pistons and rings. Also effective for cleaning all parts of dismantled motors, engines and machinery.

REMOVES:

Oil • Grease • Gums • Varnishes • Lacquers • Paints
Carbonaceous Deposits • Asphaltic Products

FROM:

Steel • Cast Iron • Aluminum • Porcelain • China
Chrome and Nickel Plate • Stone • Precious Metals
Brass • Washable Fabrics

Used throughout the war in critical industry as a superior cleaning agent, newly-developed SOLVENT "26" is now available for all industrial needs.

Offering many advantages in time, labor and cost over other present cleaning methods... Solvent "26" is so effective a detergent it can be used at *ordinary* room temperatures.

The fast action of Solvent "26" reduces cleaning time from hours to minutes on dismantled engine parts and all kinds of machinery. Simply dip, rub, brush or spray it on. Then flush clean with hot water.

Mail the coupon today for literature and information leading to a demonstration of this unique product in your own plant.

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NEW YORK • CHICAGO

Arkansas Fuel Oil Co.
SHREVEPORT, LA.

CITIES SERVICE OIL COMPANY

SIXTY WALL TOWER, NEW YORK 5, N. Y., ROOM 102

Please contact me for a demonstration of Solvent 26.

NAME.....

TITLE.....

ADDRESS.....

CITY..... STATE.....

PROJECT No. MS-2305

Taking SR-4 strain-gage readings during testing of field-erected vessel.



How to know in advance that a pressure vessel will meet all stress requirements

FOR a hundred years the most common problem of all pressure vessel engineers has been to *know in advance* the stresses which will be developed at critical points in service.

At many critical points, designers were obliged to depend upon empirical formulae. In the past 20 years much data has been gained from destruction tests. Recently methods have been developed to arrive at stress analyses by non-destructive tests.

Extensive experience in A. O. Smith laboratories with these aids has made it possible to guide effort most rapidly

and accurately in the direction of ideal pressure vessel design.

For example, in Project MS-2305, it was vital to avoid dangerous stresses at critical points where calculation was difficult if not impossible. Through the use of more than five years experience with the SR-4 strain-gage it was possible to determine that the new design would successfully withstand the incalculable stresses.

This experience and equipment is available to guide future vessel design involving stress problems in complicated structures.



A. O. Smith Research and Engineering Building, Milwaukee



A. O. SMITH
Corporation

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MAKERS OF WATER HEATERS • PRESSURE VESSELS • LINE PIPE • OIL-WELL CASING • BREWERY
TANKS • WELDING EQUIPMENT • TURBINE PUMPS • STOKERS • AND OTHER PRODUCTS

Silicones

Sirs:

I was in Washington at the time your article on silicones appeared [B&E Mar. 29 '47, p47] but I managed to procure a copy while there and read the whole story.

W. R. Collier

Vice-Pres. and Genl. Mgr.,
Dow Corning Corp.,
Midland, Mich.

Sirs:

In your publication of Mar. 29 '47 is an article on silicone resins that are sprayed on bread tins eliminating staining and cleaning.

Being in charge of the post bakery am interested in this process. Due to shortage of personnel, it is impossible to produce the required amount of bread to supply the Army personnel at the post.

With this process we could produce the required amount . . . at a great saving to the government.

Sgt. George Allen

Post Bread Bakery,
March Field, Calif.

The manufacturer is Dow Corning Corp., Midland, Mich. If you will write direct to the company, we are sure you will get the required information.

Sirs:

You had a very interesting article on silicones. We were particularly interested in the paragraph which reads:

"Orphan of Research: The silicone family has a black sheep—'bouncing putty.' It gets a lot of publicity but nobody has been able to make it useful."

For several years we have been working on a product that will have widespread use in homes and in industry. It was a development of bouncing putty which finally made our product practical from the standpoint of cost and construction. . . .

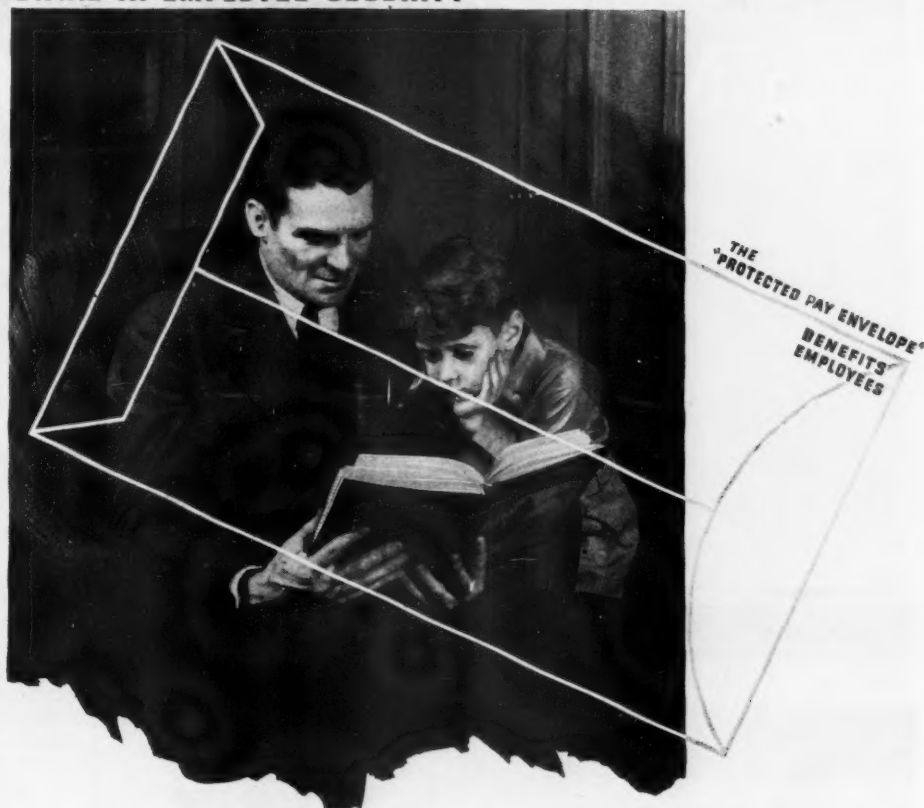
Bouncing putty is such a peculiar substance that our salesmen express the opinion that it will be very easy to sell our product because of the interesting characteristics of the putty itself. . . .

David R. Blake

Blake Industries,
Detroit, Mich.

We were happy to learn from Mr. Blake that a use had been found for this fascinating product of silicone research—bouncing putty. But we were unhappy that Mr. Blake left us up in the air.

OR EVERYONE HAS A STAKE IN EMPLOYEE SECURITY



"Once upon a time...."

there was a meeting of the Board of Directors "

meeting, of course, did not take place in any-
one's home...or did it...that evening in many
places where its effect was felt and appreciated?
When management makes extra security available to
employees through Connecticut General's Protected
Pay Envelope Plan, it speaks a language that is un-
derstood...it fills a need that is universal.

The Protected Pay Envelope Plan is flexible and
can be purchased in part or as a whole depending
on organization needs. In its entirety it includes
Group Life, Accident and Sickness, Hospital and

Surgical Expense insurance and a Retirement in-
come for employees.

Can you chart a need? Through its recently devel-
oped "Employee Security Analysis," Connecticut
General can accurately chart "needs" under your
employee security program. Nearly every organiza-
tion shows a different picture and you will appre-
ciate the practicality of this comprehensive analysis in
evaluating the moves that are most necessary in your
particular case. Your nearest Connecticut General
office will be glad to give you all the details.

**LIFE, ACCIDENT and HEALTH
GROUP INSURANCE and ANNUITIES**

CONNECTICUT GENERAL

LIFE INSURANCE COMPANY

Hartford, Connecticut

National Electric

INDESTRUCTO

Cords and Power Cables

have lots of

"ABUSE RESISTANCE"



It's no use expecting operators of portable machines and tools to "baby" the electric cords. They won't do it. You have to equip *your* tools with cords that can "take it."

That's why we build a lot of "abuse resistance" into N.E. *Indestructo* cords and cable. They're really rugged . . . have high tensile and crushing strength . . . resist flexing, kinking, abrasion, water, grease, oil and chemicals . . . and their jackets will not deteriorate under constant sunlight exposure.

From their carefully annealed copper strands to their mold-cured NEO-PRENE sheath, *Indestructo* cords and *Indestructo* power cables far exceed the requirements of the Underwriters' Laboratories, Inc. for flexibility and durability.

There's lots of good-will-building properties in *Indestructo* cords for manufacturers who equip their products with these high quality wires and cable. Users, too, can lower maintenance costs and raise operating efficiency by specifying *Indestructo* for cord replacements on their present equipment.

Everything in wiring points to NE

National Electric

PITTSBURGH, PA.



what this product was. Enough so we asked our Detroit correspondent get in touch with Blake Industries find out. Here's his report:

"The product is an automatic furniture-leveler, for use when one leg of a table is shorter than the others. The unit, called Levelmatic, is a hydraulic device containing the putty. One is put on each of the four legs; then the full-length legs are entirely depressed, the one on the short leg expands until it just touches the floor."

Taxes & Consumption

Sirs:

I have read with much interest "Tax Structure: An Overhauling Needs to be Done" [BW—Feb. 1, p39].

I am a member of a small group of Chicago men who for the past several years have been engaged in attempting to secure an amendment to the Constitution of the United States forbidding the imposition of any income tax in excess of 25% in peacetime. Legislatures of about one-third of the states have now adopted the resolution calling upon Congress to submit an amendment for ratification. . . .

It is the view of our committee that the argument of consumption versus production as a basis for releasing taxes come from taxation answers itself, that adequate consumption of goods automatically follows adequate production and cannot exist without it. . . .

We believe the argument goes deeper, since only in a highly productive economy can the luxury of individual freedom exist. . . .

F. L. D.

Daily, Dines, White & Fiedler, Chicago, Ill.

Sportswear

Sirs:

Your article on Masland sportswear [BW—May 17 '47, p100] says: "The sportswear line does not conflict with the production of Masland's rugs and carpets. These are woven in a separate plant under the supervision of Wall Bracken. . . ." Actually, it is the sportswear line which is produced in a separate plant under Mr. Bracken's supervision.

George E. Doy

Editor, Smith-Masland News Bureau, Washington, D. C.

Annual Wage

Sirs:

Your article on the guaranteed wage which we have in our union contract [BW—Apr. 26 '47, p110] was both accurate and very well written.

Accurate reporting of this type

RAIN SQUALLS DUE...



HAS YOUR BUILDING THIS WATERFOIL RAINCOAT?

A bad rainstorm may result in costly damage to an unprotected building and contents. To protect a building exterior and beautify it is now a simple process with Waterfoil. Unlike any other protective coating, Waterfoil is made of irreversible inorganic gels which bond both chemically and physically to masonry surfaces. By helping to impede water penetra-

tion into concrete, brick or stucco walls, Waterfoil prevents reinforcing bar rust, spalling or disintegration. Don't wait for the gale. Write for literature today—it's important to all building maintenance.

Horn products and methods protect millions of square feet of surface throughout the nation. Our field engineers consult with you and recommend materials and methods for the protection and decoration of any part of your structure in any climate or condition.



WATERFOIL

THE UNIQUE TREATMENT FOR EXTERIOR MASONRY SURFACES

A. C. HORN COMPANY, Inc.

Established 1897—50th Anniversary

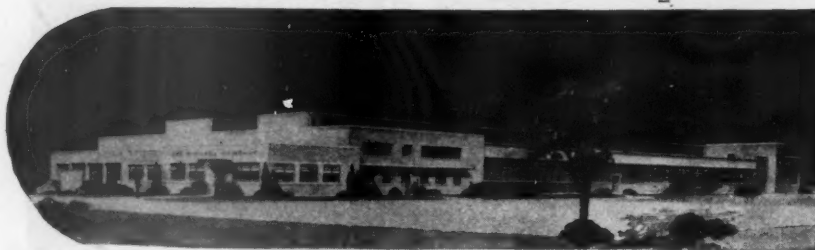
Manufacturers of Materials for Building Maintenance and Construction

43-36 Tenth Street, Long Island City 1, N. Y.

Houston, Texas • Chicago, Illinois • San Francisco, Calif. • Toronto, Canada

Subsidiary of Sun Chemical Corporation

**Here again,
WORK/ABILITY
SPEEDS OUTPUT, CUTS COSTS**



Mengel Company plant at Fulton, New York

Making corrugated paper shipping containers is not a simple matter of producing large quantities of standard boxes for future orders. It is a service business. Customers usually want special sizes and shapes, in a hurry. That calls for extremely flexible and extremely fast production.

In designing The Mengel Company's new plant at Fulton, New York, Mengel and Ferguson engineers worked together. They fused power and steam equipment, warehousing and shipping facilities, material handling, processing and finishing into a coordinated, highly mechanized, completely modern unit. First cost was held to a minimum consistent with low production cost and fast, dependable service to Mengel customers. The result is **WORK/ABILITY** . . . that inherent efficiency which has always helped Ferguson Clients keep profitably competitive. Why not discuss your production cost problems with us? Under one contract and one responsibility, we will deliver to you a plant with the **WORK/ABILITY** to produce profits. Just call, wire, or write our nearest office.

**The H.K.
Ferguson
Co.**

**INDUSTRIAL ENGINEERS
AND BUILDERS**

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Houston, Texas, M & M Bldg., Phone PReston 9134

helping Business Week achieve the
mendous success it is now enjoying.

Arnold H. Maremont

Executive Vice-President,
Maremont Automotive Products, Inc.
Chicago, Ill.

TVA's Accounting

Sirs:

Business Week carried a very interesting article on General Accounting Office's report on the bookkeeping of Tennessee Valley Authority [BW—5'47,p17].

As a citizen of a section of the country that has to be protected from floods that originate in other parts of the country, I am interested in TVA properly accounting for charges made for flood benefits to the lower valley.

Down here our engineers tell us the interests of power development and flood control are directly opposed to another, I am, also, of the impression that TVA partisans make some large claims on the basis of decreased flood hazards—as much as \$200,000.

If TVA is going to be persuaded to keep books that will more accurately reflect a true allotment of investments and expenses, Congress and the Army Engineers should make a survey which will determine this.

James Hand

Delta Implement Co.,
Leland, Miss.

Capacity

Sirs:

Please inform me about the meaning of the term "installed capacity" with reference to electric production [BW—May 10'47,p105]. . . .

John A. W.

205 Brook Ave.,
Bronx, N. Y.

"Installed capacity" of a power plant means the maximum output at an efficient operating level. That is, a 10,000 kw. unit will produce 10,000 kwh. per hour and continue to do so indefinitely.

Alloy Formula

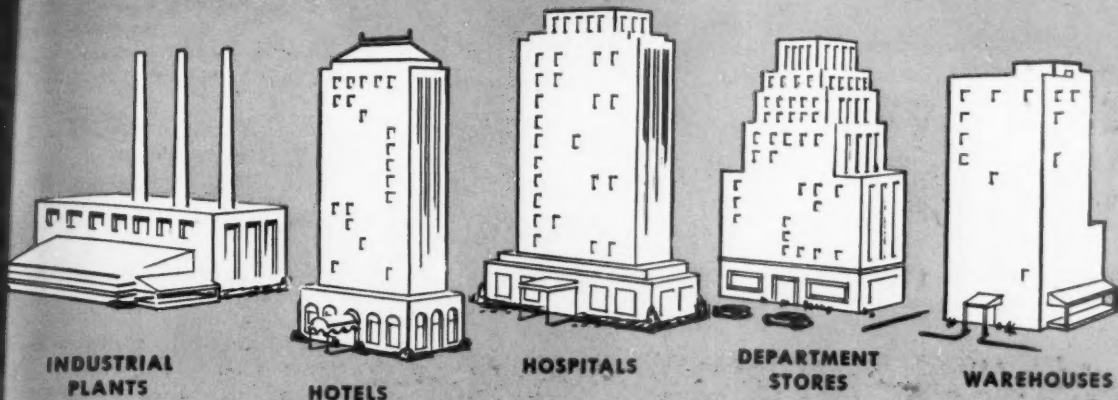
Sirs:

I am interested to know whether nickel or chromium enters into the alloy which Westinghouse research engineers have developed for use in electric motors [BW—Feb. 22'47,p44]. There seem to be discrepancies in the information given.

Norman C. S.

Arctic Enterprises,
Seattle, Wash.

The actual composition of the alloy is 35% cobalt, 64% iron, 1% chromium.

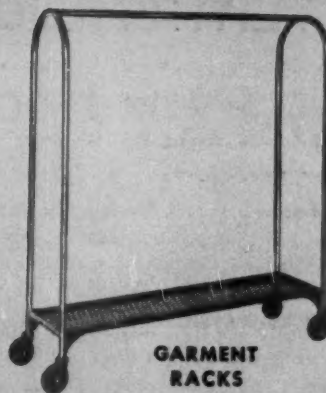
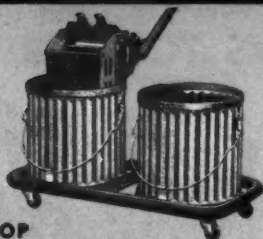


On call everywhere— *Time-Saving* COLSON TRUCKS

In industries and institutions of every size and kind, Colson trucks save time and money by simplifying materials-handling procedures.

Streamline your materials-handling operation. Make certain that the job is done easier and safer with Colson trucks.

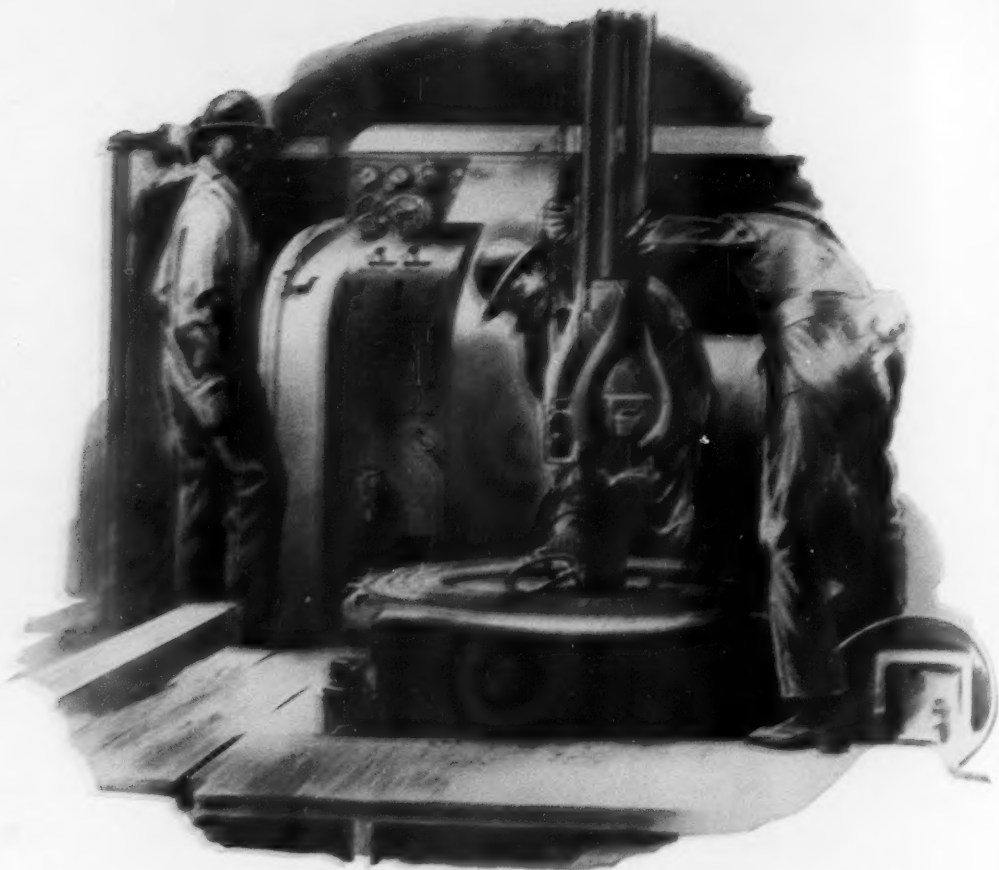
Colson casters also assure efficient service and long life. The extensive quality line includes casters for office machines, furniture, industrial equipment, tubular equipment—everything movable. Write for detailed caster and truck information.



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ELYRIA, OHIO

CASTERS • INDUSTRIAL TRUCKS AND PLATFORMS • LIFT JACK SYSTEMS • BICYCLES • CHILDREN'S VEHICLES
WHEEL CHAIRS • WHEEL STRETCHERS • INHALATORS • TRAY TRUCKS • DISH TRUCKS • INSTRUMENT TABLES



VERTICAL JOURNEYS TOO, ARE FASTER AND SAFER—THROUGH *Enginairing*

You know — of course — how Westinghouse Air Brakes help the railroads to give you a smoother, safer ride . . . but Westinghouse "Enginairing" makes a vital contribution in your personal transportation, too.

The deep-lying oil pools that furnish gasoline for your car must be tapped by complex, powerful drilling equipment, which requires positive, precise control of dozens of varied operations. Such assignments are made-to-measure for W·A·B enginairied controls, that specialize in simplifying complex tasks, and easing hard ones. On one recent installation, for instance, a

few simple W·A·B valves give instant selection: nine hoisting, nine rotary and nine sand reel speeds; permit the engagement or disengagement, singly or in combination, of two mud pumps; govern rotary cat head and drum hoist clutches; and allow the engines to be compounded in any of seven combinations.

Enginairing is helping to modernize the control of rigs, hoists and cranes, road building machinery, and work boats. If you are interested in any of these, we will be glad to give you the names of manufacturers who offer W·A·B controls on their equipment.



WESTINGHOUSE AIR BRAKE COMPANY

INDUSTRIAL DIVISION • WILMERDING, PA.



WABCO PACKING



AIR COMPRESSORS



PNEUMATIC CONTROLS

UTOMOTIVE

Review of Tomorrow's Model

Engineers' off-the-record talk at S.A.E. meeting indicates that of future will have better engines and brakes, automatic transmission, individually sprung wheels, improved visibility.

What will the car of tomorrow look like? What will its operating characteristics be? How will it differ from today's models?

Nobody knows for certain, of course. But if you listened to the off-the-record conversations at last week's meeting of the Society of Automotive Engineers at French Lick, Ind., you would have come away with some very definite ideas.

One thing is sure. No radically new model is likely to appear as long as consumer demand continues to exceed supply. It will take the economic stimulus of competition to get manufacturers to spend the money required for complete retooling. Be that as it may, most companies today are doing research along similar lines. Here's the way that research is pointing:

Most of the weight will be between the axles; there will be much less overhang beyond the wheels than at present. This may involve shortening the wheelbase, thus improving both riding qualities and driver visibility at the same time.

Passengers will be able to see more of the road ahead than they can now. The postwar Stude-

baker illustrates this trend; there will be plenty of glass all around. The windshield will curve both from left to right and from top to bottom (this will create new problems for windshield-wiper makers, which they are already well on the road to solving). The windshield will extend around the sides, beyond where the present front posts will make blind spots for the driver.

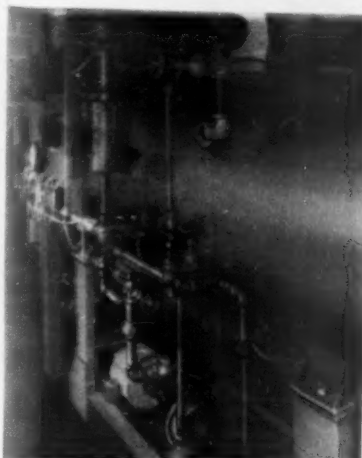
- Riders will sit on sponge rubber rather than on cushioned springs. Most upholstery will be of plastic material rather than fabric; it will wear better, and wiping with a damp rag will clean it.

- Exterior finishes will be more colorful. They will have greater depth and translucence, be longer-lasting than today's lacquers and enamels (BW-May 18 '46, p. 50). There may be even more metal trim than there is today.

- The car of the future will be even easier to drive than today's models. Automatic transmission will be available for all cars—standard on most cars, optional on popular-priced lines.

- Motors will be for more economical than today's. They will follow the principles of the powerplant described

priceless quality
precision combustion



Model SPH-50 Steam-Pak Generator supplies high pressure steam for asphalt mixing at York Stone & Supply Co., York, Pennsylvania.

For COMPACT MODERN DESIGN

Speaking of *Steam-Pak Generators*, when we say "half the size, weight, and installation cost" compared to brick-set boilers of similar capacity, we mean what we say. *Steam-Paks* are remarkably compact, mobile, and easy on the pocketbook. This "packaged" boiler plant is produced by one manufacturer, with boiler and burner built to operate together . . . designed, engineered, and manufactured on production-line principles by a single skilled organization.

Their efficiency and economy make *Steam-Paks* the wise selection for your new boiler plant. Industrial Division, York-Shipley, Inc., York, Pa.

Whether engineer or layman, you'll be interested in Catalogs ID-47-8A and ID-46-1A. Write for them.

YORK-SHIPLEY

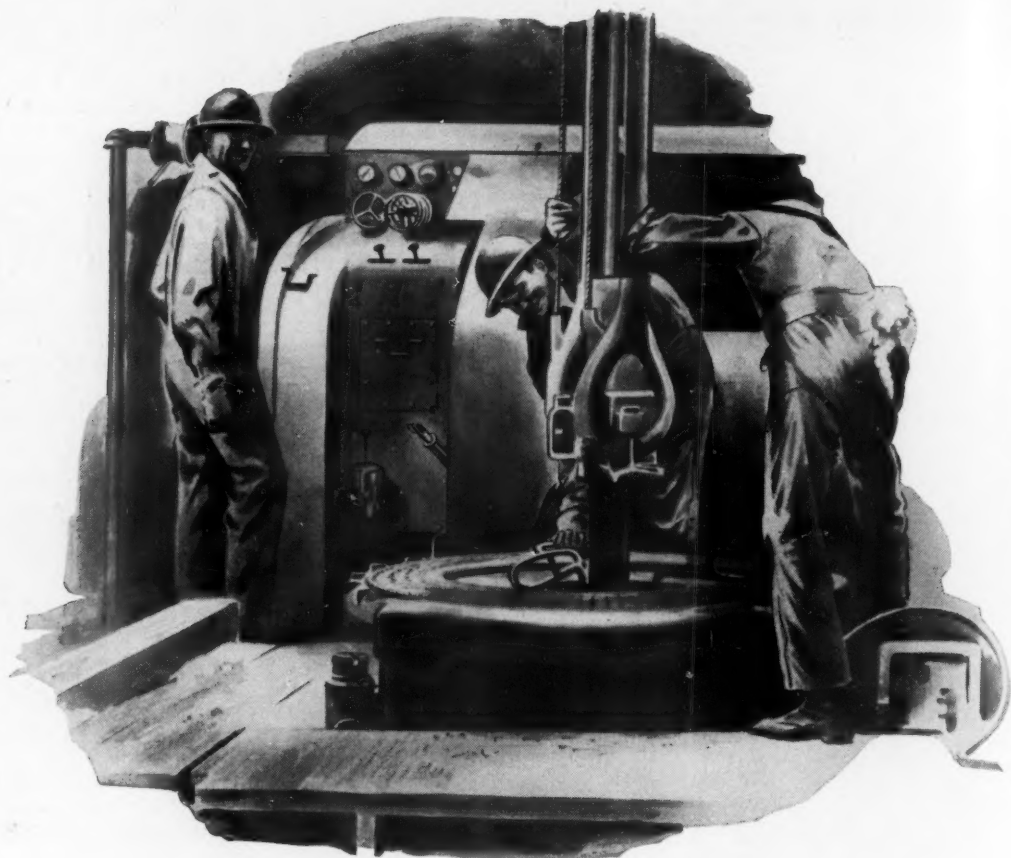
Oil-Fired Equipment for Industry

AMERICA'S MOST COMPLETE LINE
IN CANADA—SHIPLEY CO., LTD., TORONTO



PRICE \$150 MILLION—IN SHANGHAI

Automotive men are speculating plenty about tomorrow's car. But there's evidence that lots of people, here and abroad, will pay fantastic prices (page 44) for a car of today—or even yesterday. In Shanghai, you can buy a 1947 Studebaker, with 300 miles registered on the speedometer, for \$150 million in Chinese money (about \$12,500 in U.S. currency).



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INDUSTRIAL DIVISION • WILMERDING, PA.



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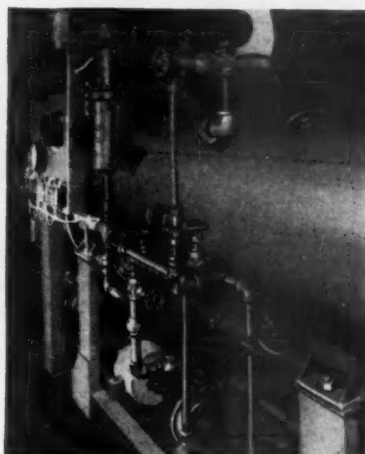
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YORK-SHIPLEY

Oil-Fired Equipment for Industry

AMERICA'S MOST COMPLETE LINE
IN CANADA—SHIPLEY CO., LTD., TORONTO



THIS IS OUR WORLD

The definition of "High" Vacuum is arbitrary. We choose to consider that the term applies to pressures less than 1 mm. Hg. absolute. The use of this pressure range for industrial processing is a recent development. The organized body of empirical information, built from performance records, which characterizes the conventional branches of engineering, is generally not available to the engineer who undertakes a project in High Vacuum.

The calculation of efficient pipe and manifold sizes, of pumping requirements and capacities, of relative outgassing of construction material, is not easily done with the published data. The effect of very small leaks at very low pressure and the degree of tightness which may be expected with suitably designed and properly built equipment is not generally appreciated. The virtues and the failings of different types of vacuum gauges and the location of these gauges for true control of processing conditions is a small field in itself.

Measurements made during our early experience in building large systems conflicted with existing information on rates of flow at low pressures. An engineer spent twelve months running tests on pipe and tubing from $\frac{3}{8}$ " diameter to 8" diameter in various lengths up to 33', including elbows, bellows connectors and valves. The results of this work are the basis of our present piping and manifold design.

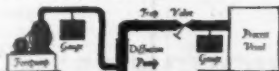
We have found it necessary to develop special pieces of basic equipment to fill specific needs in the industrial field. Our Thermocouple Gauge was evolved to meet a condition of severe vibration met in the preparation of magnesium. The Alphatron Vacuum Gauge removes the guesswork connected with pressure measurement in the presence of water vapor, a serious problem in High Vacuum Dehydration. We have built diffusion pumps with unusual characteristics to overcome problems in other fields.

Installations of our Vacuum Diffusion Process are now handling 1,000,000 CFM of water vapor at 100 microns Hg. pressure. In one plant another process is pumping in two separate operations 275 lbs./hour of water vapor at 100-200 microns Hg., and 6,300 lbs./hour of water vapor at 8 mm. Hg.

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NATIONAL RESEARCH CORPORATION
Vacuum ENGINEERING DIVISION

recently by General Motors' Chief F. Kettering (page 52).

- The engines will burn higher octane gasoline. The new fuels will be about on a par with the aviation gasolines of the war. But they will cost only one cent or two more than the standard gasoline of 1947. And they will deliver about a third more mileage when burned in the high-compression engines of the new engines.

- Higher speeds will inevitably accompany mechanically more efficient engines. Matching this will be more powerful hydraulic brakes.

- The car will ride on individually sprung wheels. Tires will be smaller and fatter, and with less air pressure.

- Significant Omissions—Those are the outlines of the car of tomorrow. But the things the engineers didn't talk about are significant, too:

- They didn't talk about engines at the rear. They figure that engine relocation would create difficult new problems of weight distribution, of cooling and of transmitting power through a short and therefore stiffer link between engine and wheels.

- They didn't talk about materials other than steel for chassis or body. No one today sees any chance that the physical and fabrication qualities of steel can be matched at competitive prices any time soon.

- They didn't talk about revolutionary methods of power generation. The Sunday-supplement atomic powerplant

HERALD OF CHANGE



Behind the new Ford coming in 1948 is George W. Walker (above), design consultant for the company. Henry Ford II has said it will represent the greatest change between lines since the Model A succeeded the Model T. Nothing more of the 1948 Ford is known—but technicians have been hard at work on it for months.

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W. W. HALE, *Vice-President, System Freight Traffic,*
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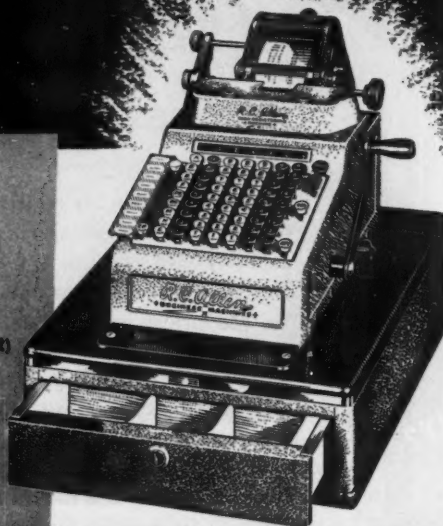
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Water Coolers

is barred because of its dangerous vibrations; the gas turbine throws out much heat; the hydraulic powerplant is believed to be too inflexible and noisy; diesels were seen as increasing in importance in buses and trucks but as being unsuitable for passenger cars.

There was one possible new type powerplant talked about at Fred Lick. Surprisingly enough, it was an old-time steam engine. Some engineers said that enough improvements had been made in it to justify its reconsideration for automotive use.

Drive on Gouging

Automakers, dealers try to wipe out resale of "used" 1947 cars at fantastic profits. So far progress is slight.

Almost anywhere in the U. S., a man who wants to buy a new car immediately can do so—at a price. All he has to do is go to a used car dealer, agree to pay anywhere from \$500 to \$1,000 more than the list price. Then he drives off a "used" 1947 car. More often than not, its mileage is equal only to the distance between the original dealer and the used car lot.

• **Worry**—Automakers are concerned about this practice, but they don't know quite what to do about it. For the present, they are simply releasing publicity aimed at convincing the public that they aren't to blame.

The basic problem, they feel, is that automobiles are perhaps the only major consumer product being sold at a price well below what the public is willing to pay for a scarce item.

What they do not like is that would-be buyers unable to get cars accuse the manufacturers of permitting their dealers to sell at prices above the lists. The companies have been checking thousands of such charges—and only rarely find them true.

• **Fadeout**—"We ran down 762 such charges in one month," said one sales manager. "We didn't find a single one that could stick. Among them were about 50 by customers who claimed that they had been promised a car by a dealer, then told they couldn't have it except by paying a premium of a few hundred dollars 'under the table.'"

"When we tried to get these complainants to go with our field men to the dealer and repeat the charge face to face, they faded out. In every case, it seemed, it hadn't happened to them. They had heard about it, they said, and couldn't personally prove it."

• **Case Histories**—In the course of checking back on virtually new cars which



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DIVISION OF THE
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MAKERS OF FINE RADIO-PHONOGRAPHS



have shown up on used car lots, auto companies have piled up hundreds of interesting case histories. One of the most surprising was that of a Chicago clergyman. It turned out that he had been able to obtain 13 new cars from dealers in the city. He hadn't sold them to dealers, but had set up a used car lot and gone into business himself.

An important supplier went to the president of one of the largest auto companies and pleaded his stark need for a new car. The president, sympathetic, got him a car. Two weeks later the car was spotted on a used car lot. "This is the first and last time I do a favor for anyone," vowed the company president. "The man told me later he couldn't resist the chance for a quick, big profit."

Another big automobile company angrily sought out a fleet buyer to explain why two recently delivered cars were for sale at premium prices on a used car lot.

"We bought those cars from your fleet owner," snapped. "It's none of your damned business what we do with our property."

• **Dealers Pitch In**—These manufacturers' checkbacks are helping in a small way to control price gouging. Dealers themselves are doing what they can to protect their business. In many cities, they have set up central listing agencies to keep track of all new car deliveries.

One of these cities is Philadelphia. There the Automobile Trade Association, composed of 112 of 140 metropolitan new-car dealers, is issuing a weekly master list of prospective buyers. Dealers can thus spot and eliminate duplicates.

The Philadelphia Used Car Association, representing 60 of the area's 150 firms in this field, has formed a seven-member vigilante committee on fair trade practices. It demands that all nonmembers stick to the association's code of ethics for the good of the industry. Those who refuse will be barred forever from membership. And in normal times, such membership may be the key to survival.

• **Public Anger**—Despite these tactics the public is still critical of new-car dealers of practically all makes. (In Philadelphia, the situation wasn't helped by a local newspaper survey showing that dealers were holding some \$500,000 in deposits—and in many cases they wouldn't be making deliveries for six months to a year. This means that dealers had a huge working capital, free taxes, and on which they paid no interest.)

"But we aren't to blame," chorus factories and dealers alike. "The average dealer's firm has \$25,000 or so invested in the business; and metropolitan dealers, the ones most often accused, often have \$250,000 at stake. They are going to jeopardize those investments and the chance to make good money for long periods ahead by collecting a few hundred illegitimate dollars."

Hard to Buy

Ford receives 450 bids in response to request for western suppliers, but only 65 below western prices plus freight.

Conflicting reports are now eddying around as to the success of Ford Motor Co.'s expanded West Coast purchasing program (BW—Feb. 15 '47, p19). West Coast people feel it is moving slowly. Ford executives say they are satisfied with progress so far. But even the optimistic Ford people admit that a two-year educational program must precede volume purchasing in the new locale.

Slow Start—The company had hoped to spend \$50 million with West Coast vendors—beyond the \$18 million it has been disbursing—for requirements for its Richmond, Long Beach, and Los Angeles assembly plants. To date a few millions in orders have been placed with new vendors, the largest reportedly being for 150,000 wheels, representing about \$1 million.

Thus far, 450 bids have been offered by the 3,000 manufacturers who saw Ford's showing of the items it wanted made in the West. Of these, only 65 were at prices equal to or lower than western prices plus freight.

Reasons—Auto industry purchasers generally blame the thin flow of satis-

FOR SHUTTLE SERVICE



And now the scooter that folds up like a suitcase (above). It's designed to be packed aboard private planes, provide "taxi" service to and from airports. Called the Airscoot, it weighs 72 lb., carries 450 lb. at top speed of 25 m.p.h. It unfolds for action in a minute flat. The maker: Aircraft Products Co., Wichita, Kan.

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EACH WEEK 1,500,000 women, most of them wives and daughters of the 1,800,000 TIME-reading men, prove they are interested in just about all the news in the world a busy person needs to know.

Here are the ratios of women readers to men for each of TIME's Departments—based on a continuing study of TIME readers:

ART.....	99	Women
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FOREIGN NEWS.....	81	Women
INTERNATIONAL.....	82	Women
LATIN AMERICA.....	75	Women
LETTERS.....	97	Women
MEDICINE.....	102	Women
MILESTONES.....	107	Women
MISCELLANY.....	101	Women
MUSIC.....	107	Women
NATIONAL AFFAIRS.....	86	Women
PEOPLE.....	102	Women
PRESS.....	81	Women
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TIME, the Weekly Newsmagazine

RADIO



FRED & PORTLAND
For reading hyenas, a neon idiom.

The World's Worst Juggler

(See Cover)

Ten minutes before broadcast time, the famous comedian pushed his way through the stage curtain and raked the studio audience with a cold, poached eye. They howled and they screamed. The comedian gave them a look of deep distaste and tongued his three-stick gum wad to the other side of his mouth. In the well-known nutmeg-grater tones, he announced: "For those of you who got caught in the crowd and swept in here—I would like to say that this is the Fred Allen show, and you still have eight minutes before we go on the air to get the heck out of here." They flailed helplessly in their seats. "Geez," sighed the admiring sound-effects man, "whatta warmup!" The comedian had long since expressed his contempt for his own skill in that field: "Warmup is a studio audience is like 'Warmup' dry ice. When you get on the air, you're already frozen."

Fred Allen has other gifts as well. John Steinbeck considers him "unquestionably the best humorist of our time . . . a brilliant critic of manners and morals." Jack Benny, his private friend and public enemy, calls him "the best wit, the best extemporaneous comedian I know." Edgar Bergen, a very thoughtful fellow among professional comics, dogmatically says that Fred is "the greatest living comedian . . . a wise materialist who exposes and ridicules the pretensions of his times." To Fred, these eulogies sound like a good definition of what he is not—and wishes most ardently that he could be. Once, when asked his supreme ambition, he replied simply: "Write, if I had the brains." Allen's output of writing during the last 14 years has been bulky . . . "I am probably the only writer who has . . ."

Reluctantly Amiable. Only in the fastnesses of his pleasant, unpretentious Manhattan apartment, where he lives with his wife Portland (the Portland Hoffa of his radio show), does Allen lower his always-loaded guns. Even then, he does not often relax. Five days a week, 14 hours a day, he squints through nine newspapers and bends over his typewriter like a jeweler, chipping and polishing at the hard little brilliants for his program. Most nights he sleeps only six hours (with ear plugs).

Allen employs four assistant writers, but he does three-quarters of the show himself. He takes their drafts and rewrites them completely—between the lines. Grouched one writer: "The only reason he hired us was because he likes to work on dirty paper." Grips Allen: "Most writers just jump from cliché to cliché." He himself is so afraid of clichés that he even shies from saying "hello" to friends.

The Allens rarely gad about. One night a week they take in a movie. The other evenings, while Fred works, Portland reads or knits in bed—an old vaudeville custom. They rarely entertain. Allen's best friends are "just plain people"—barbers, shoeshine boys, paper boys, waiters, shoe-storekeepers. With them, says Comic Henry Morgan, he is "a reluctantly amiable guy." From them, he collects an authentic U.S. idiom.

Myrrh Was Twit's. Allen comes honestly by the common touch. He was born John Florence Sullivan, 52 years ago, on the lace-curtain-Irish fringe of Cambridge, Mass. His father was a bookbinder. His mother died when he was three, and his brother Bobby went to live with her sister, "Aunt Lizzie" Herlihy, in Allston, Mass. He was a scrawny kid, all arms, legs and adenoids. The tough little Micks in his new neighborhood took one look at his pinched, birdlike face, nicknamed him "Twit," and let him play alone. To pass time—and attract attention—Johnny started juggling whatever came to hand. "That," says Fred, "was my first and biggest mistake." At six, he had performed his way into St. Anthony's choir, rose to be a Wise Man in the Christmas play. His first stage lines: "Myrrh is mine; its bitter perfume breathes a life of gath—"

What in TIME interests women? Not just Fred Allen!

► The TIME story above was read by 101 women for every 100 men. Perhaps Fred Allen is a "natural" for feminine readership. But for every 100 men, a story in that same issue's

Business and Finance Department attracted 89 women . . . an article in National Affairs, 99 women . . . in People, 104 women . . . in Medicine, 98 women.

and women who are everybody's Best Customers.



More Wheels ARE GRINDING IN MASSACHUSETTS

Another industrial leader expands in Massachusetts! The Norton Company, internationally known maker of abrasives and grinding machines, has begun construction on a new \$3,500,000 plant. Occupying nearly five acres, it will be the largest plant in the world for the manufacture of vitrified grinding wheels.

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HEART OF NEW ENGLAND'S
MASS. MARKET OF EIGHT MILLION

factory bids on the West Coast's lack of knowledge of automotive-supplier profit margins. They believe the West Coast-ers, accustomed to substantial wartime profits, did not scale down their bids to the thin margins customarily charged in the auto field, where volume alone reaps net income rewards.

On the bulkier parts which Ford was particularly interested in buying there's an even more telling reason. To produce such parts requires tooling, paid either directly or indirectly by Ford. The added costs of new sets of expensive tools interpose a new cost factor of real consequence into the quotations.

• **For Instance**—As a hypothetical example, suppose Ford now has two sources for frames, each tooled to produce them. Those sources would build Ford's entire requirements, and the cost of the two sets of tools would be amortized over the entire run.

To build a third set of tools for a new supplier would result in a new expense, increasing the cost of each individual frame. Either Ford would pay for these added tools or the vendor would—necessarily including them in his selling price and so increasing the cost to Ford.

• **No Followers**—Other auto companies give little indication of following formally the Ford program of seeking new West Coast suppliers. Their general viewpoint is that they must locate materials and parts sources in the manufac-

turing area east of the Mississippi north of the Ohio River, where automotive production techniques are better known. They say that even though suppliers might be able to meet strenuous price competition or the industry, they will have trouble with equally important qualifications in way of delivery promises.

Auto manufacturing, they point out, is a volume operation of such scope the flow of parts from vendor to assembly line must proceed with fine precision. The vendor whose shipments a day or two late shuts down an assembly line. And if his shipments are early, there's seldom a place to store them.

"Getting vendors who can fill delivery requirements is as hard as finding ones who can sell at a competitive price," remarked one automotive purchasing veteran. "We'd like to have more sources, but we simply can't find many of them."

• **Second Campaign**—Ford has launched a second venture in its program for geographical diversification of suppliers—the Southeast (BW—Apr. 26 '47, p. 8). The company says the program is still too young to tell how it will work out.

But regardless of the direct results of the program, Ford will derive one concrete benefit. The publicity attendant on the campaign for new suppliers is tremendous.



BOBBI KAR IN SOUTHERN PREVIEW

Emerging at last from the blueprint stage, Bobbi Kar, the much heralded bantam-weight automobile (BW—Feb. 8 '47, p. 30), recently received a public showing at Birmingham, Ala. Actual production is probably still several months off. But advance models of the convertible coupe-roadster and station wagon were given a three-day premiere at dealers' meetings starting May 30. The company plans other showings in New York, Chicago, San Francisco, and in the Los Angeles area. The prices at the factory for the standard roadster start at \$848.

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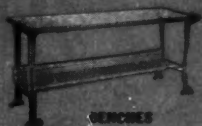
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New G.M. Engine

It uses high compression to extract greater proportion of available energy from gasoline. Special high-octane fuel needed.

Last week General Motors had big news for automobile owners: a new auto engine that offers a potential saving of 33½% in mileage per gallon of gasoline. That means an estimated saving of \$1 billion a year to drivers.

Charles F. Kettering, in a talk before the Society of Automotive Engineers, disclosed that the corporation has road-tested two standard 1946 cars, identical except that one was equipped with the new high-compression engine, the other with a production engine. Compression ratio of the new engine is 12.5 to 1, compared with the 6.5-to-1 ratio of the comparison engine. In other words, the volume of fuel and air mixture in the cylinders is compressed before ignition to 8% of its former volume.

• **High Pressure**—The experimental engine is similar in appearance to standard engines now in use. But it develops pressures of 1,200 psi. (equal to a force of 6½ tons on the piston head).

Problems caused by this pressure were solved by building a very rigid engine structure (though not a heavier one), and drawing ideas from diesel design and mechanical design in other fields. Kettering didn't say so, but this probably meant stiffer engine blocks, connecting rods, bearings, crankshafts. Under road tests, the engine showed an increase in horsepower from 85 to 95, in gasoline mileage from 18.5 to 26.5 mi. per gal., compared with the control car.

• **The Thermal Efficiency**—Kettering's announcement is evidence that gasoline engine design is approaching diesel efficiency in converting the available energy in fuel into mechanical energy. This can eventually effect an important saving in our petroleum resources.

Diesels have compression ratios running from 14 to 1 to 17 to 1. Their thermal efficiency runs as high as 38% —that is, they utilize 38% of the potential energy in the fuel. Today's auto engines, on the other hand, deliver only 25% efficiency.

Engine designers have always known that the key to greater efficiency lies in higher compression ratios. But there is an important catch—in an internal combustion engine, it is roughly true that the higher the compression, the higher the octane rating of the fuel required to avoid engine "knock."

• **A Call for Cooperation**—Kettering said that cooperative effort in research

between the auto and oil industries would be necessary to develop the special fuel required to make such engines commercially practical.

He explained that the engine needs a special fuel of about 100-octane rating; it could be produced and sold in large quantities at a small premium. The engine can't burn today's motor fuels efficiently; although aviation gasoline would be suitable, it would cost too much.

The problem is to time adoption of increased compression ratios with developments in fuels. Thus the use of high compression would be an evolutionary rather than a revolutionary process.

• **By Slow Steps**—The automotive industry could presumably increase compression in successive steps with each new model introduced, if the petroleum industry kept pace with fuel developments.

G.M. RESEARCH CHIEF



Charles L. McCuen is moving into just about the biggest research shoes in industry, but he's well qualified to wear them. He has been appointed general manager of General Motors Corp.'s research laboratories, succeeding Charles F. Kettering, retired. Kettering, associated with G.M. since 1920, won widespread fame for his automotive inventions and research. He remains as a member of the board and consultant to the corporation.

McCuen has been successively chief engineer of the Olds Motor Works, director of engineering at Olds and Buick, general manager of Olds, and, since 1940, vice-president of G.M. in charge of the corporation's engineering staff.



Automobiles WITH PAPER PARTS

● Millions of cars—among them probably the one you came to work in this morning—are equipped with parts made of Twitchell materials.

For instance, manufacturers used to use wooden dowels in the armatures of starting-motors. The dowels were inserted by hand and had to be exactly the right size. Now high-speed machines insert paper dowels, made by Twitchell.

To stop hood rattling, the automobile industry tried many different materials, finally settled on a tough lacing that is filled—well, you guessed it—with twisted Twitchell cord.

Other Twitchell products are used as tacking strips in metal seat frames, as insulation between fenders and bodies, or as waterproof seals between

windshields and bodies in most cars.

And woven Textilene Sunsure* fabrics, like those shown in the picture above, are among the most successful materials for seat covers. They are bright and colorful and stay that way. In fact, they withstand a 200-hour FADE-OMETER test without objectionable, and often without perceptible, fading. They are fashionable. They wear well. They're cool in summer, easy to slide over. We don't make the seat covers, but we supply the fabrics to more than 200 firms that do.

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FINISHED PRODUCTS—PRODUC-TROL
CAN SAVE YOU TIME, MONEY, TROUBLE

With the Produc-Trol system of control you can see at a glance the constantly changing status of how much is in stock, how much is needed to meet specific delivery dates, which items are overstocked or understocked, and when you should re-order. These, and many other facts that will make your business more efficient, are made instantly visible—no wasting of valuable time searching through countless records and innumerable cards.

Over 7500 firms, large and small, depend on Produc-Trol not only for inventory control but also for production scheduling, machine loading, budgets, sales management and many other business operations.



Produc-Trol
PICTURES FACTS FOR ACTION

WASSELL ORGANIZATION
Westport, Connecticut, Dept. BW-6
Tel. Westport 2-4112
Offices in 68 Principal Cities • U. S., Canada
and 25 Overseas Countries
Write today for booklet.

NAME
ADDRESS
CITY STATE

MARKETING

A Buyers' Market Is Still Big

That's Silex Co.'s conclusion after a full year's market saturation test in Peoria area. Even after all war-accumulated demand had been satisfied, sales ran nearly four times prewar volume.

Take it from Silex Co., the normal postwar market for hard goods is nearly four times as great as the prewar level—if you cultivate it.

• **Informal Forecast**—J. M. Moore, general sales manager of the Hartford (Conn.) company, had everyone's attention at the National Sales Executives Conference in Los Angeles last week when he gave this opinion. For the delegates knew that Moore wasn't pulling his forecast out of thin air. It was based on history: Moore and his company had created a buyers' market six months ahead of schedule in the Peoria (Ill.) area.

Even in this buyers' market, sales of Silex coffeemakers during the first four 1947 months averaged 274% greater than the 1940 monthly average. And this was in physical volume—not dollar volume.

Moore is sure the Peoria pattern is

going to be the nation's—so sure that Silex is projecting national sales quotas on the basis of the Peoria test.

• **Backlog**—Back in 1945 Silex discovered, as did many other companies, that it had a backlog of orders about four times the best previous year's business. This undoubtedly called for expansion of plant capacity and raw-material inventories. But Silex, a relatively small company, couldn't be sure how great the expansion should be and how fast it should take place until this backlog of orders could be more definitely evaluated.

So Silex decided to pick a single market area and flood it with all the coffee-makers (the company also makes other durable goods) it would take. The idea was that the controlled experiment would furnish an estimate of the surge buying that would take place immediately when goods were available. And



Silex Co. predicts: Home appliance prospects are as shiny as its coffeemaker.



They came—They saw—They were sold on *The* Pathfinder *PLAN*

PATHFINDER has proved again that Main Street communities constitute this country's most up-and-coming market for manufactured goods. From May 5th to 10th—in Stroudsburg and East Stroudsburg, Pa., PATHFINDER's demonstration of Main Street's selling strength drew many thousands of interested consumers, manufacturers, distributors and salesmen. Approximately 500 were representatives and top executives of national manufacturing concerns and their advertising agencies. They saw convincing evidence that on Main Street better selling methods and adequate attention *move more goods to more people.* They saw

one auto dealer take orders for 25 new cars . . . and several merchants increase their sales 200% over the figures for the same week last year . . . and Wurlitzer pianos at \$685 being sold and orders taken for more. They saw brand-name merchandise going to customers as *preferred* merchandise. Goods were sold on brand and quality—no price reductions were advertised.

PATHFINDER Magazine's faith in the sales potential of Main Street towns has been well justified. And PATHFINDER's pride in its million subscriber-homes in these towns is equalled only by that of the influential and prosperous people who live in them.

Concrete results of the Pathfinder Plan at work, as demonstrated by retail selling strength of the Stroudsburgs will soon be ready for you. Ask for them.

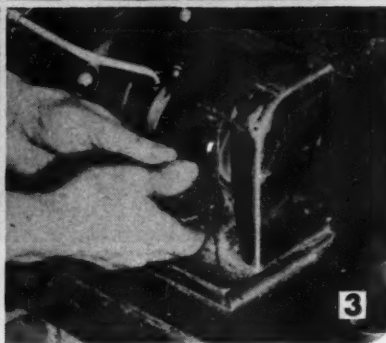
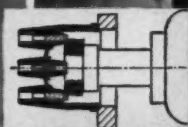
THE FAMILY NEWS MAGAZINE THAT INFLUENCES MAIN STREET

More than 1,000,000 circulation

GRAHAM PATTERSON, Publisher
Washington Square, Philadelphia 5, Pa.



**Brush away
those
Small Job
Headaches!**



EVERY plant has them—tedious, time-consuming jobs involving the cleaning and finishing of small parts and assemblies. Little jobs individually, but collectively costly operations that have an important bearing on the price tag of the finished product.

Scores of companies have adopted brushing as a solution to these small job headaches. A typical example is the West Pullman Works of the International Harvester Company, Chicago, which is devoted to small parts production for their wide line of farm equipment. Illustration No. 1 shows a special holder fitted with Osborn Situft brushes which removes burrs from terminal inserts inside tractor motor distributor caps. These inserts are almost impossible to reach by hand yet the job takes only seconds by brushing.

Removing varnish from magneto rotors and smoothing sharp edges with an Osborn brushing wheel is pictured in Illustration No. 2. And the little 2-inch Osborn brush shown in Illustration No. 3 cleans the secondary leadout of magneto coils.

Yes, they are little jobs but the savings made possible by brushing bulk up big on the cost sheet. Why not find out now where brushing can brighten your production picture? An Osborn sales engineer will gladly assist you in this analysis. Just say the word—soon.

THE OSBORN MANUFACTURING COMPANY
5401 Hamilton Ave. Cleveland, Ohio



WORLD'S LARGEST MANUFACTURER OF BRUSHES FOR INDUSTRY

then, after this spending spree had died down and sales had leveled off, Silix would have a record of what the market could be expected to support on a "normal" day-to-day basis at present levels of national income.

By creating this situation in the test area while hard-goods lines remained scarce on a countrywide basis, Silix was confident that it would have a good forecast of national trends six months in advance.

• **Test Area**—After a good deal of thought the company finally chose Peoria as the test location for the scheme (BW—Jun. 15 '46, p70).

The details of the "market absorption plan" had been painstakingly worked out. Silix selected Peoria and nine surrounding counties for several reasons: The city had good shipping facilities from the factory, but was also well isolated from other distribution centers; there was a small but well diversified industry; there were relatively few displacements of population and industry in the area as a result of the war.

• **Controls**—In return for giving distributors and dealers all the coffee-makers they asked for, Silix laid down certain definite conditions. Weekly reports of the number of physical units sold had to be furnished the manufacturer. All promotional activities, both in time and in amount, were to be governed by Silix.

Also the distributors and dealers were pledged not to sell any of their merchandise to distributors and dealers outside the test area. To make doubly sure of this point, the company set up an elaborate checking system to check the movements of all shipments. The penalty for any violation of the rules was to be complete loss of merchandise. In the first 12 months of the test only one instance of sales to outside dealers arose.

It was equally important that the population not get the idea that it was the guinea pig in an experiment. Although there have been several articles about the plan in the business press, the company holds that such stories do not get through to the average consumer. When the mass-circulation *Liberty* magazine did an article on the area and the plan last January, it referred to Peoria only as "Test City, U. S. A."

• **No Cooperation**—Silix would have preferred to get other manufacturers to conduct similar tests in Peoria, and for everyone to swap information. This would have created a situation of more normal competition for the consumer dollar and would have made the results even more accurate. No one took advantage of the offer to swap information. But several other durable-goods manufacturers have been conducting similar tests in the area. This, of course, gives Silix the assurance that there has been some competition for the consumer dol-

it hasn't just been a one way street. But to be on the safe side, the company has been lopping off 20% from the sales figures to correct for leakage of coffeemakers to outside areas and the fact that the normal competitive situation has not prevailed.

First Results—The report on the first months of the plan's operation was compared last year (BW—Dec. 7 '46, p. 50). In the first month, May, physical sales in stores to consumers were almost 15% above the 1940 monthly average. In the second month, the total was closer to 18%. In the third and fourth months, the figures dropped to about 7½ times average.

There was plenty of merchandise in stores, but the customers weren't buying. Silcox believes that the average consumer was so accustomed to seeing "display purposes only" signs under the wanted durable goods that she assumed it was true of coffeemakers, too. The dealers were then permitted to advertise. Sales picked up slightly in May, but dropped to only three times the 1940 average in October.

Second Spurt—This was the point at which the first report left off. Since sales to distributors had averaged about twice those to ultimate consumers, it was like the pipelines had been filled. The Christmas buying season gave sales a terrific spurt.

In November, the beginning of the Christmas season, sales went up to almost nine times the 1940 average. And

December sales went back up to June levels—almost 18 times the 1940 average.

• **Back to Normalcy**—However, 1947 marked the turn. Figures for the first four months show definitely that Christmas brought the end of the period of surge buying. In the first two months of this year, sales to consumers slipped to the lowest point yet recorded, a little less than three times what they had been in 1940. In March they climbed to about seven times the 1940 average. In April they fell back to the levels of January and February.

Despite this drop, sales for the four months still averaged 274% more than in 1940. While this represents a terrific decline from the 960% increase shown by the final eight months of 1946, it is still very heartening to Silcox officials.

• **Help Needed**—But Moore maintains that the sales records piled up in the Peoria area would not have been nearly so high if the Peoria distributors had been left to work their problems out alone. It is not that they are any worse than distributors elsewhere. It is simply that, like distributors everywhere, they had forgotten how to sell.

Prodding by the company representatives helped distributors to regain that lost selling touch. And the company is sure that such help will also be required on a national level if sales are to come up to Peoria levels.

• **The Only One**—Some skeptics may hold that the Peoria experiment does



*How do
you advertise
without
competition?*

• The answer: by using Diamond Book Match advertising, where no surrounding ads or editorial matter compete for your prospect's attention. Your ad is the *only* ad on a Diamond Match Book.

Other advantages too. Diamond Book Match advertising is distributed for you in any selected market areas, in any selected quantities, during any selected time periods. Thus you can cover each market according to its individual needs.

You pay for space only on the matches. You pay only 17% of the total cost. Each ad is exposed to a prospect twenty times. The cost is as low as 2/1000 of a cent per reader exposure. You get full color in small space. You can put as much selling copy on a Diamond Match Book as is in this ad.

Let us analyze your advertising and sales problems and prepare a Diamond Book Match campaign tailor-made to your needs. No cost or obligation. Write for full information today.



THE
**Diamond
Match**

COMPANY
Dept. 8-107, 318 S. Michigan Ave.
Chicago 4, Illinois

*The pocket-sized answer . . .
to man-sized media problems*

Now The Swedish Shopper Rolls Her Own



To the U. S. housewife at her daily marketing, self-service has become an old custom. But in Sweden it was no new that the Swedish shops had no word for it. So when a big Stockholm cooperative borrowed the "supermarket" idea, it borrowed the name too—witness the words "Self

Service" in big letters across the top of the meat counter (left). Like her sister across the sea, the Swedish housewife chooses her own meat and canned goods (right), stows them into the neat double-decker cart that is the badge of self-service in the United States.



WHEN A MAINE MAN TAKES A JOB



"When I took my job here, I took it with the intention of keeping it. Now there's only one way to keep a job—and that's to do it well. Been here eleven years now, but that isn't long for a Maine man. Come back eleven years from today, and I bet you'll still find me here.

"Meanwhile, my son has been discharged from the army and has joined the same plant. I'm mighty pleased about this. I like the company so well, that I wouldn't want my son to work anywhere else. He likes it here, too.

"My boy wasn't the only Maloon to put on a uniform. I'm a lieutenant of the State Guard. I like to feel I'm being useful—useful when I'm at work—useful during my spare time.

"I have lots of hobbies, too—chief one's bird hunting. I have three dogs and I raise pheasants for training. Like amateur photography, too. Hobbies keep a man keen—keep his mind keen, his eye keen and his hand keen.

"I have a job that I like—I have hobbies that I like. I can say truthfully that it's a great life up here in Maine."

Leonard E. Maloon

We could talk about Maine's moderately priced power—about Maine's proximity to America's largest industrial goods and consumer appliance markets—about Maine's rich resources, pure processing water, fair taxes, year round "production weather", excellent transportation facilities. But the big plus about Maine as a site for industry, is that the spirit of Mr. Maloon is typical of the working men and women throughout Maine.

It would pay to investigate the industrial possibilities of Maine, if you are thinking of moving, expanding or decentralizing. Send for free booklet, "Industrial Maine".

STATE OF MAINE
THE PLACE TO WORK,
TO LIVE AND PLAY
INDUSTRY

MAINE DEVELOPMENT COMMISSION, STATE HOUSE, AUGUSTA, MAINE

not justify generalization on a national scale. But there are no other experiments to contradict Silex. Some time ago, the Gannett newspaper chain conducted a survey of order duplication in hard-goods lines in Rochester and Elmira, N. Y., and in Hartford, Conn. It showed that there wasn't nearly as much duplication as had been advertised. Many marketers were reluctant to accept this study too. But when it was placed alongside the Peoria experiment, the two projects serve to confirm one another.

After all, the shift in distribution of income during the war (BW—May '47, p94) has definitely lifted demand for hard goods. The great increase in the number of families is another factor that indicates prewar sales figures may be out of date as far as postwar targets are concerned. Whether the new targets will be sufficient to absorb all the increased postwar production capacity is another story.

NORTON STEPS UP

Victor T. Norton is the new president of American Home Foods, Inc. Previously the company's executive vice president, Norton succeeds H. V. Roden, mystery-writing executive who has apparently transferred his major interests to Hollywood (BW—Apr. 5, p65). Roden was also vice-president of American Home Products Corp., parent of American Home Foods. He now retains only his directorship in the latter.

Norton has had more than 20 years experience in the food and merchandising field. He has been assistant president of Jewel Tea Co., Inc., vice-president of Cudahy Packing Co. and vice-president and director of Kayon & Eckhardt, Inc., the advertising agency. During the war, he served on various food advisory committees.



Victor T. Norton

Argument

Some newspapers dislike Life's tie-ins that plug Life magazine. Fear loss of both revenue, national advertisers.

alter Annenberg of the Philadelphia Inquirer didn't like it. Neither did other newspaper publishers. Most of them mentioned no names, said only that they were through selling advertising to retail stores at local rates. The ads gave undue promotion to local magazines. But James W. Jr., of the Toledo (Ohio) Blade, wrote right out and said it: He was talking about Life Magazine.

"Too Low"—Newspaperdom's criticism centers on Life's promotion of ads. In them, retailers urge newspaper readers to come to their stores, for Life-advertised products. The ads usually placed at local rates and feature a reproduction of the magazine's cover or the familiar block-letter title. One of the complaints is that rates for retailers' display ads are lower than for national ads. Publishers thus feel that many of these ads should be charged the national rate.

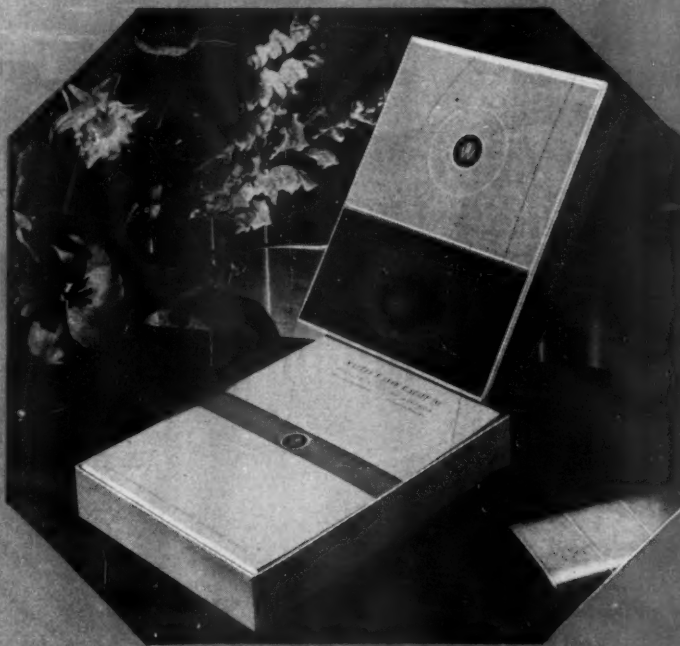
The ratio between space given to Life and that devoted to the retailer and his products varies directly with the retailer's size. In some cases Life gets merely a mention. But one retailer ran a page of 14 Life covers, taking up more than half a newspaper page.

Loss of Ads—A greater worry to newspapers is the circumvention of the possible loss of national advertisers. They fear that the continuation of such a program might lead national advertisers to trim newspaper advertising, count on retailers' ads tied with magazine advertising to carry the load. The loss of revenue from taking the tie-in ads at local rates might be serious. But publishers think the loss of national advertisers' newspaper ads would hurt.

Unbalance—Not all newspaper publishers feel that the ads are harmful. To balance the scattered comments, Life pointed out several newspapers that liked the program. In fact, it asked Life for mats and other material to use in selling department stores during the tie-in ads.

Life feels that it is more or less an innocent bystander. It pays no money for the ads, does not make up the advertiser's copy. It does, however, push the program by furnishing material to the retailer make up his local advertisements. And it encourages the national advertiser to follow through on Life program through local ads, radio promotions, and radio adver-

TOO GOOD for your records and correspondence? *Not at all!*



WESTON PAPERS *Cost No More*

Just because they are recognized as the *finest made* for business records and correspondence doesn't at all mean that Weston Papers will cost you more. Fact is, Weston Papers cost no more than other papers of the same cotton fibre content grade. So why not enjoy the extra efficiency, security and satisfaction that goes with keeping all records worth keeping on Weston Papers? Your supplier prefers Weston quality, too. He'll gladly run the next batch of letterheads, records or forms on a Weston Paper.

BYRON WESTON COMPANY
DALTON, MASSACHUSETTS

WESTON MAKES IT

BONDS
WESTON'S BOND
Bond No. 1, 100% Cotton Fibre
WESTON'S BOND
100% Cotton Fibre
WESTON'S BOND
75% Cotton Fibre
WESTON'S BOND
50% Cotton Fibre
WESTON'S BOND
25% Cotton Fibre

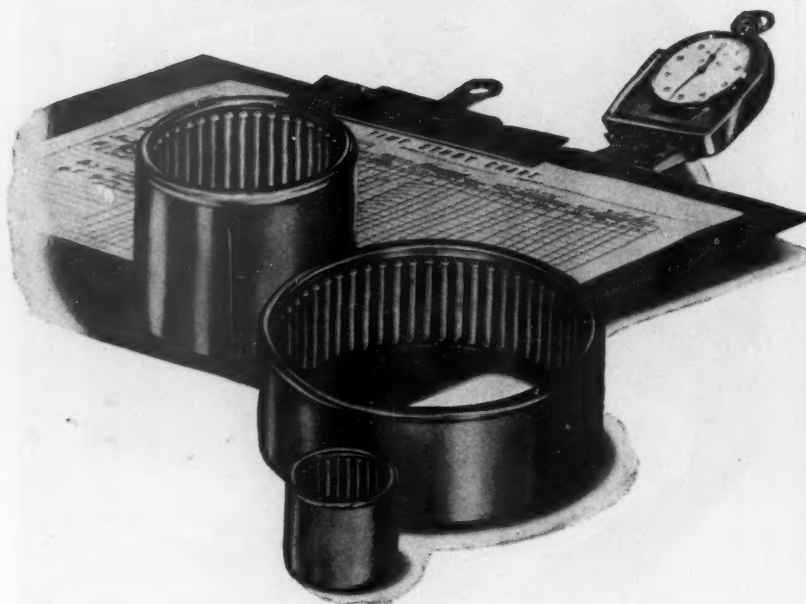
LEDGERS
BYRON WESTON CO.
LEADS
Bond No. 1, 100% Heavy White
Bond No. 2, 100% Heavy White
WESTON'S LEADER
100% Cotton Fibre
WESTON'S LEADER
75% Cotton Fibre
WESTON'S LEADER
50% Cotton Fibre
WESTON'S LEADER
25% Cotton Fibre

INDEXES
WESTON'S INDEX
100% Cotton Fibre
WESTON'S INDEX
75% Cotton Fibre
WESTON'S INDEX
50% Cotton Fibre
WESTON'S INDEX
25% Cotton Fibre

MACHINE ACCOUNTING
WESTON'S MACHINE
75% Cotton Fibre
WESTON'S MACHINE
50% Cotton Fibre
WESTON'S MACHINE
25% Cotton Fibre

Weston *Makers of Papers*
for Business Records





When every second counts...

Whether you are laying out a design, tooling up for production or meeting an assembly schedule, Torrington Needle Bearings can help you speed up every operation. You can

Save time with Needle Bearings...

first because their sturdy, compact construction helps simplify many design problems. Then, too, they help reduce fabricating time—a plain bore, machined to proper dimensions, provides the bearing housing. And assembly is speeded because no spacers or retainers are required—and installation involves only a simple arbor press operation. Thus, you can save production time and reduce costs with Torrington Needle Bearings. Our Catalog #32 contains complete data including many helpful production suggestions.

THE TORRINGTON COMPANY

TORRINGTON, CONN.

SOUTH BEND 21, INDIANA

Offices in All Principal Cities

TORRINGTON BEARINGS

• NEEDLE • SPHERICAL ROLLER • STRAIGHT ROLLER • TAPERED ROLLER • BALL •

tising. All, of course, should be tied with his Life schedule.

• **Kroger Ads**—Life's most extensive effort in this direction recently has been in connection with Kroger Co. Advertisements in more than 1,100 newspapers have plugged Kroger's new promotion of national brands (BW—May 3 '47, p. 66), but it is Kroger's advertisements in Life that have drawn the most attention. Only a few newspapers demand



Charles C. Mortimer, Jr.

GENERAL FOODS SHIFT

To fill its newly created post of vice-president in charge of marketing, General Foods Corp. has selected Charles C. Mortimer, Jr. He has been with the company since 1928, and vice-president in charge of advertising since 1943. In his new job Mortimer will supervise the sales, advertising, market research, and consumer service divisions.

For Mortimer's successor as director of advertising, the corporation broke precedent by choosing a woman: Mrs. E. B. Myers, who had been General Food's associate advertising director.



Mrs. E. B. Myers

the national rate or changes in for the Kroger ads. Life may try to persuade newspaper publishers that an intelligent handling of the situation can provide more advertising revenues for both newspapers and the magazine.

OLD TRICKS, NEW SALES

etailers are beginning to dust off old tricks for luring customers into stores. One of the latest to reap is the merchandise certificate for gifts. In two of the latest give-promotions by furniture stores, and homemakers stand to gain

Lloyd's Furniture Store in Long Beach, Calif., the "bride of the week" receives a \$25 merchandise check. Prospective brides are invited to sign the store's "bride book," from which the bride is selected each week. She is asked to decorate a show window with room furniture selected from the store's stock. Pictures taken of the bride in her chosen living room are then used for local advertising.

On the other side of the continent, Brooklyn (N. Y.) customers of Michaels, Inc., receive a \$3.50 gift under different circumstances. A few days after purchasing the book "Creative Home Decorating" at Michaels, they receive a letter and gift check from the president of the company refunding the cost of the book.

The check can be used as part payment for purchase of anything in the store except fair-traded merchandise. The only requirement is that the total purchase amount to at least \$9. According to a store executive, sales in which merchandise certificates have been used average over \$50.

CONTAINERS STILL SHORT

In this era of shortages, marketing people have been made painfully aware of an unalterable fact: You can't sell products unless you have containers to put them in.

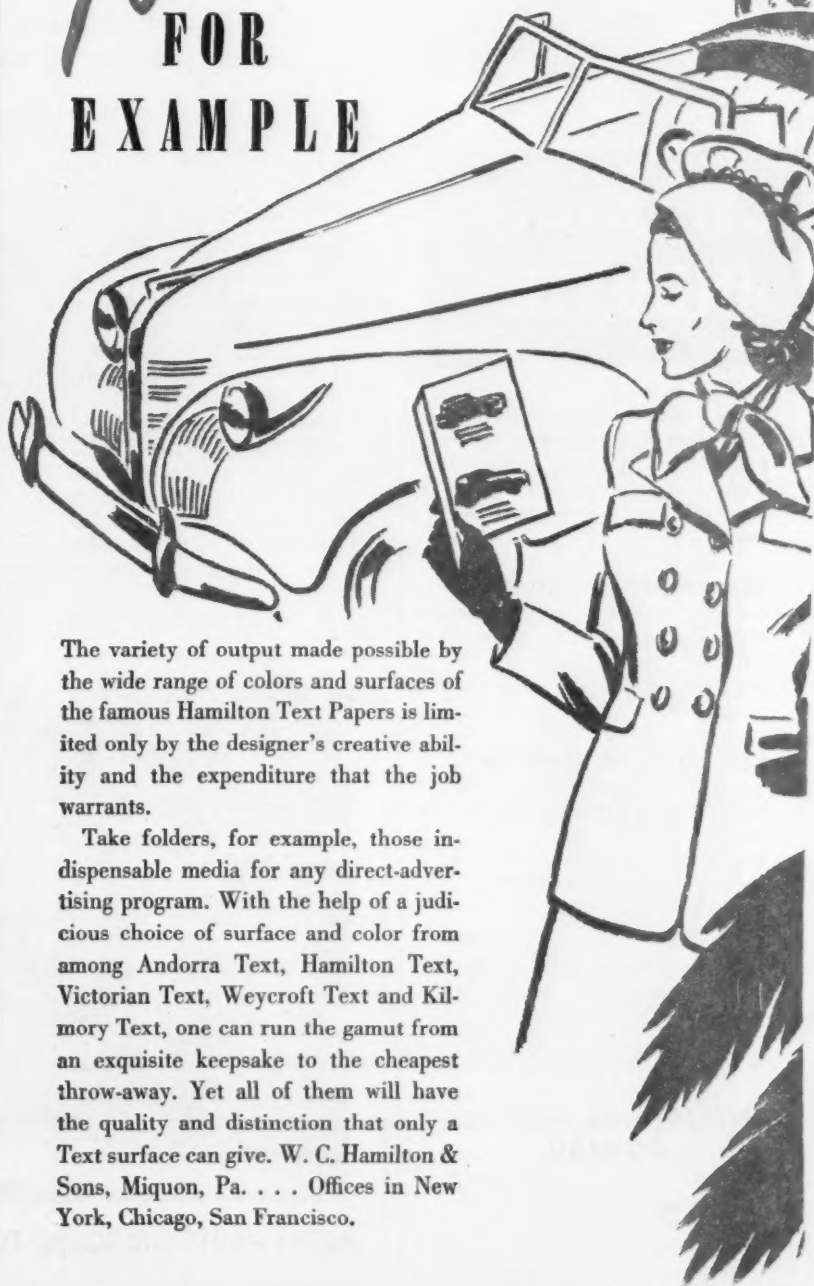
A forum on containers at the National Assn. of Purchasing Agents last week gave marketers little cause for comfort. The box score:

T. Barton of the Jones & Laughlin Steel Corp., Pittsburgh, predicted: Steel drums will be tight for the rest of the year due to shortage of steel sheets.

H. MacLeod, vice-president of the H. & Dauch Paper Co., Sandusky, N. Y., said: Paper shipping boxes will be in short supply through 1947.

D. Alexander of Bemis Bro. Bag Co., Indianapolis, was more encouraging. Cotton bag prospects look fairly bright—although burlap might continue to be hard to find.

Folders, FOR EXAMPLE



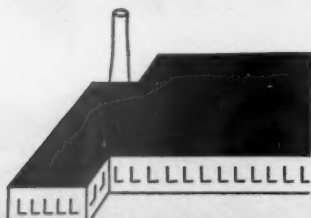
The variety of output made possible by the wide range of colors and surfaces of the famous Hamilton Text Papers is limited only by the designer's creative ability and the expenditure that the job warrants.

Take folders, for example, those indispensable media for any direct-advertising program. With the help of a judicious choice of surface and color from among Andorra Text, Hamilton Text, Victorian Text, Weycroft Text and Kilmorey Text, one can run the gamut from an exquisite keepsake to the cheapest throw-away. Yet all of them will have the quality and distinction that only a Text surface can give. W. C. Hamilton & Sons, Miquon, Pa. . . . Offices in New York, Chicago, San Francisco.

HAMILTON PAPERS



VIGOR



To Assist INDUSTRY

There is nothing static about Columbia, South Carolina. Here you will find the energy and drive essential to keep industry moving along the road to full production and profits.

HELPFUL ATMOSPHERE — In Columbia you will be in the midst of a growing, expanding community. You will find people eager to work and adaptable to your particular needs.

KEEP ALIVE WITH GROWTH — Recently numerous new industries have found in Columbia the ideal place to establish their plants. Others have selected Columbia for their expansions. Abundant labor is available for all.

Let us assist you in selecting a site, in helping with your building plans, or in conducting local surveys. All without obligations, of course.

• Write, wire or telephone to:

INDUSTRIAL SERVICE BUREAU

Dept. B P. O. Box 1405
Liberty Life Building
Columbia, S. C.
Telephone 4-1026

COLUMBIA

SOUTH CAROLINA

PRODUCTION

Low-Temperature Coke Over

Pittsburgh Consolidation Coal building plant to make by Disco process, which uses low-cost, fine screen coal. Coke for home heating; tar and its derivatives are chief products.

The world's largest commercial coal company took a second step toward product diversification last week.

Pittsburgh Consolidation Coal Co. placed a \$3-million contract for a low-temperature coke plant. The product is called Disco (from distilled coal). Last March, the same company announced a cooperative venture with Standard Oil Development Co., subsidiary of Standard Oil Co. (N. J.), for the gasification of coal (BW—Apr. 5 '47, p48).

• **Differences**—The company will not be in direct competition with high-temperature methods of coke-making (Koppers and Allied Chemical & Dye). There are basic differences:

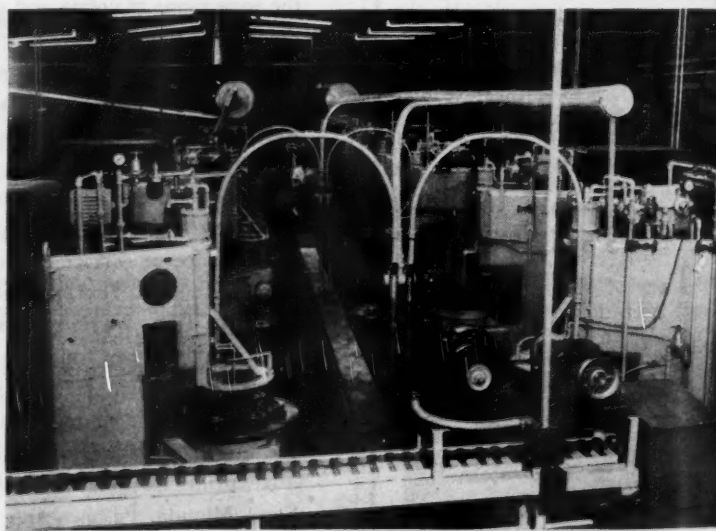
• High-temperature coke making uses high-grade raw coal; Disco uses low-grade coals of fine sizes. (Mechanization of mining tends to increase the

proportion of these slack sizes for which there is no profitable market.)

• High-temperature coke is widely used for industrial fuel and in steel making. Disco with its low-temperature process is more interested in the strong demand for tar (a byproduct) and tar derivatives, and in selling the coke itself as a smokeless fuel in home-heating applications.

• **The Process**—Advantages of the Disco process, according to Consolidation, are: (1) lower raw material costs; (2) lower capital investment; and (3) lower operating costs.

The Disco process isn't complicated. Coal smaller than 4 in. is mixed with a proportion of Disco breeze (recycled coke) prior to roasting to 600 F in a heating operation. The mix is then carbonized at 850 F. When the temperature reaches 700 F it begins to give off hydrocarbon vapors, and distillates



METAL PARTS AIR-BORNE FOR FAST OUTPUT

Pneumatic conveyors (above) speed metal-stamping processes at Manufacturing & Tool Co., Burlington, Vt. In stamping out parts for "bug bombs," it was found that high press speeds could be used if the parts could be whisked from the presses fast enough. Compressed air and tubular conveyors did the trick—for light, cylindrical stampings (they weigh only a few ounces each). After the part is stamped out, it is blown from the press to an overhead air tube which feeds the central conveyor.

Mechanized Selling . . .

is the best, quickest, and cheapest way
to accomplish the first three steps
in manufacturing an order.

**CLOSE
THE
ORDER**

**MAKE A
SPECIFIC
PROPOSAL**

... applying
your product to
the prospect's problem

**CREATE
PREFERENCE**
... for your product

**AROUSE
INTEREST**

... in your product

CONTACT

all the men
who directly or
indirectly control
the purchase of
our product

When your advertising is performing its function (steps 1,
2 and 3), your salesman can concentrate on steps 4 and
5 . . . permitting him to make the maximum and most
effective use of his productive time!

330 WEST 42ND STREET, NEW YORK 18, NEW YORK

IMAGINE!

**A One-ton
WHITING
Electric Hoist
for Only
\$230⁰⁰**
F.O.B. HARVEY
ILLINOIS



PROVIDES FASTER, EFFORTLESS, MONEY-SAVING LIFTING



No plant can afford to be without these time-saving electric hoists. Even when used only a few minutes a day, they pay for themselves in a very few months. Workers like them, too, because they make it so easy to handle back-breaking loads.

To install a Whiting hoist, simply hang it up, plug it into the nearest electrical outlet, and it's ready for use. One man can install it without assistance. Yet it is plenty rugged to stand up under heavy duty.

**Whiting
ELECTRIC HOIST**

If it Saves One Man
Only 12 Minutes a Day,
....it Pays a Profit!



Write for Bulletin H-100A

WHITING CORPORATION
15661 Lathrop Ave., Harvey, Ill.

- ☐ Send me a copy of your Bulletin H-100A.
☐ Send me the name of the Whiting distributor in my locality.

NAME _____

STREET ADDRESS _____

CITY _____

STATE _____

begins. As the particles soften and become plastic, and the revolving motion of the carbonizer kneads and presses the mass into individual roughly spherical in shape. These —from 1 in. to 8 in. in diameter— separated from the excess breeze, which is recirculated.

Distilled vapors and gases are moved. The gas is used to heat the process.

• **The Products**—The yield per ton of charged coal is 1,440 lb. of Disco, 3 cu. ft. of 375-B.t.u. gas, and 15 gal. of crude tar. From each 100 gal. of crude tar, a separate refining process obtains 28 gal. of tar-acid oil, 25 gal. of creosote oil, 19 gal. of fuel oil, and 204 lb. of pitch coke pellets.

Pittsburgh Consolidation, through its subsidiary, Disco Co., has been running a Disco pilot plant near Pittsburgh for several years. Output reached 6,000 tons of coke per month (It sells for \$9 a ton at the plant; a ton delivered. This is higher than the cost of high-temperature coke.) The proposed plant will produce about 27,000 tons annually. Operating economies are expected to cut consumer cost about 10%.

• **Licensing**—Pittsburgh Consolidation expects to exploit the process through license arrangements, presumably with other coal producers seeking means of utilizing slack coals, and interested in potential chemical byproducts.

Better Tools

September machine-tool show in Chicago to reveal new products designed to provide increased economy for users.

The pattern of the machine-tool industry's campaign for postwar business is now becoming clear. Chief emphasis will be on new and improved types of tools that manufacturers just can't afford to be without. The 186 members of the National Machine Tool Builders Association will show the world what they have in their sleeves in the way of innovations at the association's exposition in Chicago Sept. 17 to 26.

• **Added Competition**—The machine-tool industry has always been highly competitive. But since the end of the war, it has had to face a new, formidable competitor—the War Assets Administration. War gave the industry its greatest boom in its history. So it was that it would be faced with a lot of surplus tools when peace came. But it was hoped that many of them would go to schools and to small companies that couldn't have afforded to buy new tools anyhow. That would have left the

What makes a Leader?

In a Golfer...

It's personal skill... rhythm in action, coordination... relaxation. It's experience... know-how, practice, constant improvement... attention to details. And it's determination... to win... to be a leader.



In a Typewriter...

It's manufacturing skill... that gives you rhythm in action, coordinated key stroke, perfectly balanced for accurate, speedy performance.

It's manufacturing experience... seasoned know-how gained during more than fifty years in making more than six million Underwood Typewriters... and understanding the typewriting problems of business in general, and secretaries in particular.

It's manufacturing determination to excel... to give you the best typewriter that engineering science can conceive and produce... the Underwood.

Underwood has them all... the qualifications that make today's Underwood Typewriters masterpieces of typewriter engineering... a treasure to own and a pleasure to use. The things that make today's Underwood "Typewriter Leader of the World."

Choose the New Post-War Underwood

"It's got rhythm"... Rhythm Touch! an important Underwood feature, made possible by a brand-new typing mechanism. Fast, feather-light, delightful... your fingers swing naturally into effortless typing rhythm on this perfectly balanced, smooth-running post-war Underwood. Now available... as well as the popular Underwood Noiseless and treasured Underwood Portable.



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Typewriters... Adding Machines... Accounting Machines... Carbon Paper... Ribbons and other Supplies
One Park Avenue New York 16, N. Y.

Underwood Limited, 135 Victoria St., Toronto 1 Canada
Sales and Service Everywhere

Underwood...

Typewriter Leader of the World

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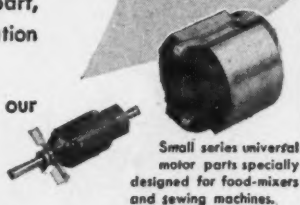
A NAME IDENTIFIED WITH MOTOR DEPENDABILITY

Lamb Electric

Specially designed for each particular application with efficiency and long-life built into every part, Lamb Electric Motors have established a reputation for dependable service.

Contributing importantly to this dependability is our 31 years' experience in designing and building small motors for over three thousand special applications.

THE LAMB ELECTRIC COMPANY • KENT, OHIO



Small series universal motor parts specially designed for food-mixers and sewing machines.

Lamb Electric

SPECIAL APPLICATION
FRACTIONAL HORSEPOWER MOTORS

Testing a crystal frequency calibrator at 76° below zero in the Frick Refrigerated Laboratory of Bendix Radio, Towson, Md.



Hold Any Temperature You Want with



Refrigeration

"Cold" down to 130 degrees below zero F. is now common in research and test work. Penicillin is dried at minus 75. Foods are quick-frozen at minus 30 to minus 60; are stored at zero to minus 20. Ice is frozen commercially in brine at 16. Fresh foods are held at 34 to 36. Drinking water is cooled to 45. Air conditioning, at 70 to 85, tops the scale of refrigerating loads. • Whatever the temperature wanted, you can hold it most dependably with Frick Refrigeration. Sixty-five years' experience says so!



This installation is among the thousands of stores, restaurants, hotels, clubs, theatres, offices, industrial plants, etc., which find Frick Air Conditioning indispensable.

DEPENDABLE REFRIGERATION SINCE 1882
Frick Co.
RAYNESBORO, PENNA. U.S.A.

manufacturers—traditionally the tool builders' chief customers—as a big market for tools for reconversion.

But sales to schools were disappointing. And big war contractors were given first chance to buy government-owned tools they had been using in their own plants; many of them took advantage of this opportunity. Thus, while the big companies still must buy a lot of new machine tools, the need is not so great as it normally would be.

• **Depression Technique**—So the builders fell back on the technique they had employed in the past when depression caused their business to sink practically out of sight. They put their engineers and designers to work to build new machines that would make the ones produced during the war obsolete. This, they reason, will force big industry back into the new-tool market, because of the economy in production which the new machines offer.

• **Fourth Show**—The Chicago show will be the fourth held by the association the first since 1935. It will be housed in the Dodge-Chicago plant; the association has subleased 500,000 sq. ft. from Tucker Corp., which leases the plant from WAA (BW—May 24 '47, p24). More than 1,000 machine tools, plus related equipment and appliances, will be shown.

The association is pleased by the response already evident in the form of advance reservations by tool users. These come not only from the United States but from Canada, South America, and Europe as well.

• **Some Prices Up**—Meanwhile, some members of the industry have recently boosted their prices. The amounts varied up to a maximum of 10%. Reasons behind the move were (1) decreased production of some lines, resulting in higher unit cost, and (2) the fact that prices have gone up very little since the end of the war to compensate for higher wage rates and material costs.

SHOCKS FOR FREIGHTS

Shock and vibration are the principal causes of lading losses, freight car repairs, and railroadbed damage. Now hydraulic shock absorbers may help to reduce both freight damage and costs.

Monroe Auto Equipment Co., Monroe, Mich., has experimented for ten months. It believes that absorbers, similar to those used on railroad passenger coaches and automobiles, can cut losses as much as 93%. Roadbed maintenance can also be reduced. Shock absorbers for all types of freight cars were developed during testing at Waugh Laboratories, New York.

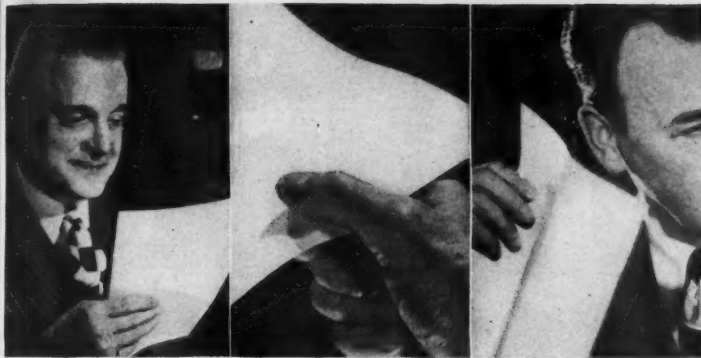
Typical installations will be shown at the exposition of the Railway Supply Manufacturers Assn. in Atlantic City the week of June 23.

ANNOUNCING

Cockletone

HAMMERMILL BOND

The finest letterhead paper ever produced by Hammermill craftsmen



SEE its quality... FEEL its quality... HEAR its quality...

Give it the "eye test." You'll agree it makes the unmistakable, immediate quality impression you have associated with your finest letterhead paper—no matter what you've been accustomed to pay.

Give it the "finger-tip test." Note the "heavier" feel that provides the character, dignity and quiet impressiveness you want in the letterheads you send out as representatives of your business.

Make the "ear test." New Hammermill Cockletone Bond not only is better—it *sounds* better. Note the fresh, crisp, crackly "ear appeal" that proclaims outstanding bond paper quality.

HAMMERMILL presents to American business a new product of papermaking research and skills—Hammermill Cockletone Bond.

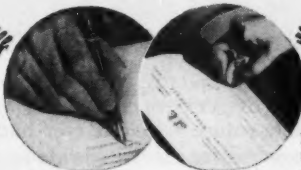
This new paper is tub-sized and air-dried, handsome and distinctive in appearance, sturdy, with the crisp snap and "heavy" feel that says: **QUALITY**. It is the kind of accomplishment you have the right to expect from Hammermill resources and craftsmanship.

If you have wanted a finer paper to convey your business messages, we invite you to examine the new Hammermill Cockletone Bond. After you see its quality, its moderate price may surprise you.

Available also are matching envelopes in appropriate sizes.

TEST its writability

Over the firm, smooth surface of this fine paper your pen or pencil fairly glides. Typing stands out clear, clean and sharp.



TEST its erasability

No disfiguring erasure marks on this handsome and sturdy letterhead paper. Saves stenographers' time. Avoids needless waste.

Look for this watermark
**HAMMERMILL
Cockletone
BOND**

**SEND FOR THIS
FREE SAMPLE BOOK...**

Shows samples of paper in a variety of weights.
• Compare **HAMMERMILL COCKLETONE BOND** with other quality papers. Make any test you like! • Even if you're not ready to order new letterheads right now, send the coupon today. Keep the sample book in your file to remind you.



Hammermill Paper Company,
1455 East Lake Road, Erie, Pennsylvania.

Please send me—**FREE**—a sample book showing the new **HAMMERMILL COCKLETONE BOND**.

Name _____

Position _____

Please be sure to write on, or attach coupon to, your business letterhead. BW-6-14



For hand-lifting jobs

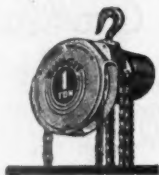
For those places in factories, warehouses, stores, service shops—everywhere where loads must be lifted by hand—'Budgit' Chain Blocks are the answer.

They are portable hoists. One man can lift, carry and hang up the largest size with which he can lift loads up to 2 tons. You can readily see how simply the smaller sizes can be used.

Loads are lifted easily for the 'Budgit' converts practically all the effort into effective lifting. This extraordinary efficiency comes from modern design, anti-friction bearings throughout, and all parts, including the automatic load brake, operating in grease in a sealed housing.

'Budgit' Chain Blocks are great time-and-money savers. Actual service in thousands of installations has proved this. So if you must do hand lifting, install 'Budgit' Chain Blocks with the certainty that they will pay for themselves many times over in their long lives.

'Budgit' Chain Blocks come in sizes to lift up to 1/4, 1/2, 1 and 2-ton loads. Prices start at \$39.50. Send for Bulletin No. 367 for complete information.

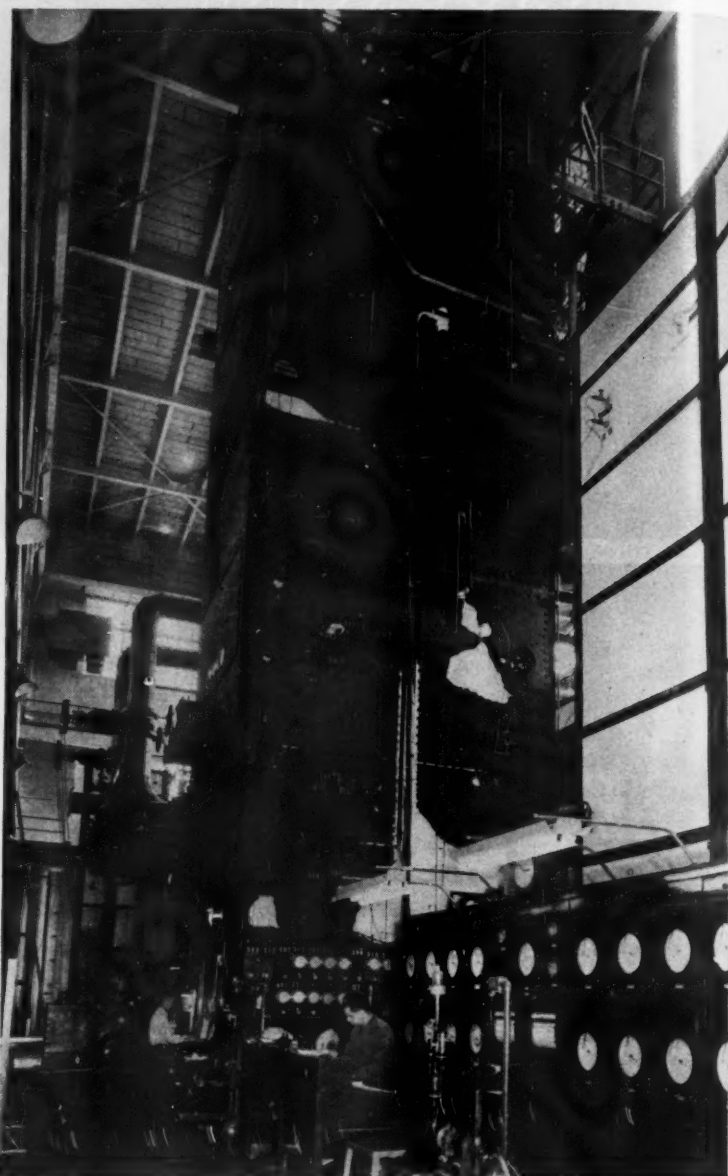


'BUDGIT'
Chain Blocks

MANNING, MAXWELL & MOORE, INC.
MUSKEGON, MICHIGAN

Builders of 'Show-Box' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and 'American' Industrial Instruments.

Lots of Oxygen for Plenty of Steel



Hottest subject in steel-making circles these days is the use of oxygen to boost production, possibly reduce costs (BW—Feb. 1 '47, p72; Sep. 7 '46, p16). One major question facing the industry is this: Can oxygen in tonnage quantities be produced cheaply enough to warrant its use?




Linde Air Products Co. last week unveiled the tonnage oxygen unit (above) it hopes will answer this question. Located in Linde's East Chicago (Ind.) plant, it produces about 4,800,000 cu. ft. (200 tons) of 90% pure oxygen daily. (Commercial oxygen in general use now is 99.5% pure.) In operation seven months, it


is claimed to be the largest single operating unit for producing gaseous oxygen ever built. Despite its size, Linde still terms it a "pilot" unit.

The unit includes equipment for purifying and cooling incoming air (upwards of a million cu. ft. an hour at 80 psi.) and a fractionating column where extremely low temperatures separate the oxygen.

Linde is working with 24 steel mills in probing various phases of oxygen use in steel making. These tests, however, are being run with its regular commercial oxygen; that from its "pilot" unit is simply exhausted to the atmosphere.

The conquest of CANCER is progressing.

Last year medical science  saved the lives of thousands of cancer patients, and many more might have been saved  if cancer had been discovered early. While specialists say that the best means known for treating cancer is complete removal by surgery, or destruction by x-rays or radium rays, experiments  with other methods are constantly going forward.

Chances of cure are best when cancer is treated in the early stages. To detect early cases, there are 3 things  everyone should know!

1 What are the "Danger Signals" that may mean Cancer?

1. Any unusual lump or thickening, especially in the breast. 2. Any unexplained bleeding. 3. A sore that does not heal, particularly about the mouth, tongue, or lips. 4. Noticeable changes in the color or size of a mole or wart. 5. Loss of appetite or continued unexplained indigestion. 6. Any persistent changes in elimination.

2 What should you do when warnings appear?

Get medical advice at once! Remember, the "danger signals" show that something is wrong, but they are not sure signs of cancer. At one leading clinic nearly 9 out of every 10 women who came for examination because they recognized the warnings and suspected cancer, did not have the disease!

3

Why are annual physical checkups important?

Cancer often starts without any warning signals that the patient can detect. Only examination by a skilled physician may discover these "silent" cancers in their early stages. That is why annual medical examinations are so important, especially for older people.

There is progress in cancer research, too!

Today, more and more people are living to older ages when cancer is most prevalent. Cancer still ranks second among the causes of death, but medical science is continually increasing its knowledge of the disease, and working to develop new and better techniques for its control.


Many promising experiments are being carried on. Atomic research has provided valuable new materials for

laboratory study of cancer cells. Clinical research and intensive studies in chemistry, biology, and physics also give real hope that the secrets of cancer will be discovered.

To help protect yourself from cancer, and to learn more about this disease, send for Metropolitan's free booklet, 67-S, "There Is Something YOU Can Do About Cancer."

COPYRIGHT 1947—METROPOLITAN LIFE INSURANCE COMPANY

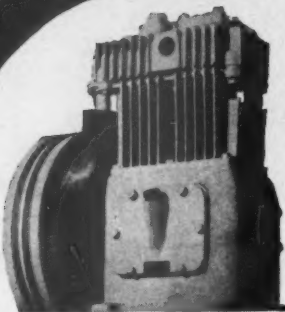
Metropolitan Life Insurance Company (A MUTUAL COMPANY)

Frederick H. Ecker,
CHAIRMAN OF THE BOARD
Leroy A. Lincoln, PRESIDENT
1 MADISON AVE., NEW YORK 10, N. Y. 

TO EMPLOYERS: Your employees will benefit from understanding these important facts about cancer. Metropolitan will gladly send you enlarged copies of this advertisement—suitable for use on your bulletin boards.

TO VETERANS—IF YOU HAVE NATIONAL SERVICE LIFE INSURANCE—KEEP IT!

modern design . . .
increased efficiency . . .



and now
**authorized
service!**

Another first for Quincy!
Quincy has pioneered another new idea in the compressor field. To assure outstanding service for Quincy users, a nationwide organization of Authorized Service Depots has been organized. These Service Depots are easily identified by this sign:



Availability of uniform high quality services is an extra value that you get when you select Quincy Compressors. Furthermore you can get the right compressor for your job. Select from the Quincy line of air compressors ranging in size from 1 to 80 c.f.m. Air and water-cooled models for intermittent and continuous operation. Wide range of standard and special mountings. Quincy builds air compressors *exclusively!* Have a Quincy Compressor specialist help you with compressed air problems!

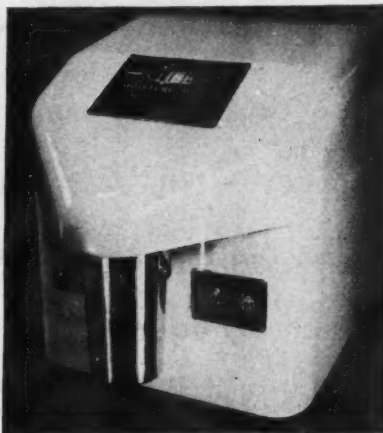
Quincy
COMPRESSORS

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Dept. F-77, Quincy, Illinois
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Chicago • San Francisco
St. Louis

NEW PRODUCTS

Moisture Measurer

Quick readings of moisture content are possible with a new electronic



meter made by C. J. Patterson Co., 3947 Broadway, Kansas City, Mo.

The device is applicable to solid, liquid, granular, or powdered materials. It acts automatically, gives direct readings. No calibration curves or charts are used, and correction for the temperature of the material is automatic. According to the manufacturer, readings can be taken in 15 seconds, and moisture content up to 85%-90% can be measured with an accuracy comparable to the traditional oven-balance methods.

Availability: limited quantities beginning July.

Vertical Steel Boiler

A new steel boiler, called High Therm, incorporates special flue and baffle design that results in "greater capacity per square foot of heating surface." Flues and boiler shell are made of the same steel composition; both are $\frac{1}{2}$ in. thick. Burner plate is adjustable for various heights of burner blast tubes. With all surfaces vertical, soot problems are minimized, according to James W. Johnson & Co., Inc., 95 Liberty St., New York 6. The boiler is furnished in three ratings: 400, 600, and 800 sq. ft. for steam, equivalent to 640, 960, and 1,280 sq. ft. for water.

Availability: prompt delivery.

Self-Energized Magnetic Pulley

For automatic separation of magnetic and nonmagnetic materials, or separation of tramp iron from belt-conveyed coal, ores, chemicals, sand, etc., Eriez Mfg. Co., 2594 E. 12th St., Erie, Pa., is producing a magnetic pulley that re-

quires no current to generate the magnetic field. The pulley is fitted with permanent alloy magnets, works through belts of rubber, canvas, leather.

Claimed advantages are that the permanent-magnet pulley eliminates possible sparking, is unaffected by heat, or moisture, operates at top efficiency because strength cannot be affected by electric current variations. Operation and maintenance costs are "virtually eliminated."

Availability: deliveries one to six months, depending on size required.

Speedy Adhesive

Developed for gluing hard or soft wood, sheet asbestos, foamed glass, phenolic laminates, and other assemblies, Durez 13793 sets at room temperature in one hour. The resin type adhesive is manufactured by Durez Plastics & Chemicals, Inc., North Tonawanda, N. Y.

Durez states that the resin adhesive meets government specifications that require a durable, boilproof adhesive that sets at temperatures of 70 F. or higher. The resin is water-soluble. Storage life is said to be six months in sealed containers. The resin is used with a powdered hardener (Durez 1268) and will also carry extra filler and without impairment of bonding qualities.

Availability: delivery in 30 days.

Axial Air-Gap Motor

In conventional electric motors, magnetic lines of force follow a path that is radial to the axis of rotation. Fairbanks, Morse & Co., Chicago, now producing a line of motors in which the magnetic lines of force follow a path parallel to the axis of rotation.

The motors range from $\frac{1}{4}$ hp. to 10 hp., suitable for horizontal or vertical mounting, or mounting on an end base for belt drive.

The outstanding features obtainable through the use of the axial air-



multiple are reductions in space and weight requirements. According to the company, the new motor (right) is less than half the size of the conventional type (left), weighs approximately less. It is easily serviced, is particularly adaptable to mounting on machine tools, gear units, and machines where compactness is essential. Also, it is said to run cooler.

Refrigeration Aids

For home-freezer owners who wonder what happens when the power goes off, Buft Associates, 1053 Main St., Buffalo, N.Y., offers the Freezer Sentry. If temperature inside the cabinet rises to plus 10°F, a drop of mercury falls to the bottom of a tube, makes an electrical contact, sounds a buzzer. No thermostat is required, and the buzzer operates on two flashlight batteries. Battery life is said to be five years because the device contains a trickle charger which provides 24 hours of continuous operation of buzzer. Anyone can install it.

To prevent ice trays from sticking in refrigerator compartments, Pego Chemical Products Co., 117 Arch St., Philadelphia 6, has a liquid product. Pego Non-Froster is packaged in a bottle with a built-in sprayer. It is said to be odorless, harmless to foods when sprayed into the tray compartment.

Availability: immediate delivery, both in bulk and in small quantities.

Induction Heating Unit


The Ohio Crankshaft Co.'s Tocco Division has announced a versatile bench-type induction heating unit called the Toccotron. The firm says it is a low-cost device, designed primarily for brazing and soldering; but it is also adaptable to hardening, annealing, and other applications. A feature of the



unit, according to the maker, is that it requires no water connection; it operates from an ordinary 110-120-v. wall socket. The Toccotron can be used on automatic or manual operation. It can operate continually a full load for mass production work or be quickly adapted for one-off tool or tool-room operations.

Availability: immediate delivery.

Container Quiz



What?
Why?
Which?
Where?
When?



General All-Bound Box



General Nailed Box



General Corrugated Box



General Wirebound Crate



General Cleated Corrugated Container



General Lift Pallet

25 years' experience in designing better containers for all industry.

• The answers to these 5 questions are of vital interest to all those concerned with the better packing of their products.

"WHAT container will provide better protection, will best ship our products?" We think that General Boxes will provide better and more economical protection for your products.

"WHY?" Because they're designed specifically to the product, as a "Part of the Product."

"WHICH type of container will do the most efficient job?" The answer to this important question is provided by our Engineering Service.

"WHERE is this service available?" For complete information just write our nearest office.

"WHEN?" ... is best answered by your doing this right now.

ENGINEERED SHIPPING CONTAINERS

General BOX COMPANY

GENERAL OFFICES: 502 N. Dearborn St., Chicago 10, Ill.
DISTRICT OFFICES AND PLANTS: Brooklyn, Cincinnati, Detroit, East St. Louis, Kansas City, Louisville, Milwaukee, New Orleans, Sheboygan, Winchendon, Wicheita.
Continental Box Company, Inc., Houston, Dallas.

25 YEARS YOUNG

1922-1947



This near-perfect service!

HOW seldom light and power fail except through storm or accident!

The men in the power plants of the country are proud of their record and use every modern device to assure continuous service. The majority of these men know Ashcroft Gauges—as their fathers and grandfathers did.

For nearly a hundred years Ashcroft Gauges have indicated or recorded the vital pressures of steam, water, gas or oil and earned a reputation for enduring accuracy.

Many thousands of Ashcroft Gauges are in use in public utilities; air, sea and land transportation and in general industries.

If you are planning initial installations for pressure processes or replacement of pressure gauges, you may specify "Ashcroft Gauges" with the absolute certainty they will perform to your utmost satisfaction.

Stocked and sold by leading Distributors everywhere... When you order gauges, insist on ASHCROFT... Write for booklet.



ASHCROFT

Gauges

A Product of
MANNING, MAXWELL & MOORE, INC.
BRIDGEPORT 2, CONNECTICUT

Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and 'American' Industrial Instruments. Builders of 'Show-Box' Cranes, 'Budgit' and 'Load Lifter' Hoists, and other lifting specialties.

FINANCE

(THE MARKETS—PAGE 114)

Drop in Yields Hurts Insurers

Rate of return on life companies' portfolios falls below for first time. Reasons: federal easy-money policy, more government bonds. Effects: lower earnings, lower interest on policies.

• Why have millions of dollars of life insurance funds been going into housing developments lately?

• Why are the life companies rapidly building up their investment in such other income-producing real estate as retail store properties (BW—Jan. 4 '47, p48), office buildings (BW—Dec. 21 '46, p70), industrial plants (BW—Jan. 18 '47, p70)?

• Why has the group greatly stepped up its purchases of new securities direct from issuers in order to save middleman charges, and sharply increased its direct advances to corporations on unsecured loans of the type normally handled by banks (BW—Dec. 14 '46, p80)?

• Why are steps being taken to rebuild volumes (and profits) of once-lucrative personal loan departments?

• In a Nutshell—The answer is now apparent: In 1946, according to the Insti-

tute of Life Insurance, the net yield of life companies' invested funds fell below 3% for the first time in history.

The 1946 earnings rate came to 2.92%, compared with 3.07% in 1945. As recently as 1939 the return was 3.70%, or over one-quarter higher than last year. Back in 1925 it ran at 5.25%. The trend has been steadily downward ever since the early 1930s.

• **Government Bonds**—Much of the drop, of course, has been due to the tremendous flow of insurance funds into U. S. government issues. These yields of only 2.50% or less.

Such purchases, obviously, skyrocketed during the war years. Since 1940 holdings of governments have jumped from \$5,800,000,000 to around \$21,200,000,000. They now account for almost 40% of all life company security and mort-

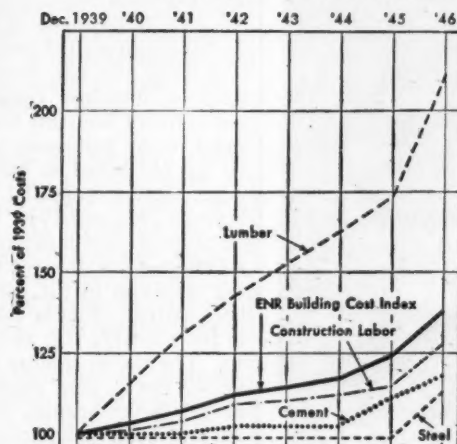


MAKING ONE ROAD OUT OF TWO

Signing of an agreement in Cleveland recently made official the merger of two of Robert R. Young's roads: Chesapeake & Ohio Rwy. Co. and Pere Marquette Rwy. Co. Flanking C. & O. president R. J. Bowman as he signed were (left to right) W. H. Wenneman, vice-president of the merged lines; H. F. Lohmeyer, secretary and treasurer; J. C. Kaufman, general counsel. This merger, says a C. & O. official, makes it the seventh U. S. road in point of operating revenue.

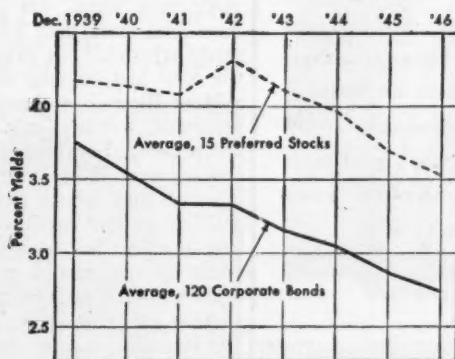
ONE Cost of an Expanding Business is DOWN!

Cost of Plant Construction



(a) Cement, F.O.B. Chicago. (b) Lumber, Engineering News-Record 20-cities average of 2 x 4 s4s pine and fir. (c) Structural steel, base price. (d) Skilled construction labor, Engineering News-Record 20-cities average.

Costs of New Capital



(a) Corporate bond yield, Moody's average. (b) High grade preferred stock yield, Moody's average.

The cost of capital is *one* element of cost in expanding a business that has not increased, but actually has decreased substantially in recent years.

In December 1946 the Engineering News-Record Building Cost Index, combining skilled labor and essential material costs, was 38.6% higher than for December 1939. In May 1947 the percentage of increase had reached 48.9% over December 1939. The ENR Construction Cost Index, which includes common labor, increased 66.5% between 1939 and May 1947.

By contrast, the cost for a company with good credit standing to finance such construction or machinery through sale of senior securities is 20% to 30% less than in 1939. Today's low money rates, partly counterbalancing the rising physical costs of expanding a business, should be an effective inducement for a management to act promptly in their financing plans.

KIDDER, PEABODY & CO.

FOUNDED 1865

NEW YORK

BOSTON

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CHICAGO



Do a CRANE JOB with a LIFT TRUCK?

**EVANS PRODUCTS CO. does it
... with a ROSS**

This ROSS 12 HT equipped with a ROSS channel boom cuts dozens of man hours off unloading time at Evans Products. The channel boom, like other ROSS attachments, makes one ROSS Lift Truck serve for two, or more, specialized machines. The channel boom slips off in a matter of seconds — no pins, bolts, or clamps — and the ROSS is ready for regular lift-truck work. Pneumatic tires make heavy load handling easy indoors and out, in all kinds of weather. Here's a lift truck that does any number of jobs around your plant — and cuts off a lot of man hours on every one. Capacities range from 5,000 to 18,000 pounds.

Take a tip from Evans — let a ROSS cut your handling overhead



THE ROSS CARRIER CO.

300 MILLER STREET, BENTON HARBOR, MICHIGAN, U.S.A.
Direct Factory Branches and Distributors Throughout the World

investments, vs. only 23% a year before Pearl Harbor.

• **Easy Money**—Almost equally responsible for the drop in the earnings rate, however, have been the effects on the general economy of the government's easy-money policy over the last 15 years.

For example, this factor has generated one wave after another of corporate security refundings since the early 1930s. Each of these has resulted in the placement of huge amounts of life company portfolio holdings with new securities providing ever-smaller returns. In addition, such refundings have pushed down yields obtainable by the companies on their open-market security purchases.

Actually the rate of decline in the yield on insurance companies' investments hasn't been any sharper than the trend of the high-grade issues they, by law compelled to buy. The underwriters' return dropped 2.33 basis points between 1925 and 1946; Moody's Aaa grade bond yield index fell 2.35 points.

• **Offsets**—Over the years the effect of the reduction in the earnings rate has been partially offset by the improvement in the mortality rate among policyholders. The rise in security prices has also helped out to some extent. It has permitted the companies, for example, to sell long-held, high-rate corporate bonds at a good price, and to dispose of holdings of tax-exempt municipal securities at fancy premiums.

And the recent years of prosperity have permitted the life companies to recover more on what had once been doubtful assets than they had ever expected. This has been particularly true in realty. As a result of the depression foreclosure wave, the life companies once held more than \$3 billion of real estate scheduled for disposal. By 1946 the total had dropped to \$125 million.

• **Hard Blow**—But the drop in the investment earning rate has been a severe blow. Earnings last year, for example, were little more than half the amount they would have been if the 1925 yield had prevailed; if the 1925 rate of return had been in effect, investment income would have been some \$300 million greater than it actually was.

As a result, only 20.2¢ of the 1946 life insurance income dollar came from earnings on invested funds. In 1921, 21.5¢ was provided by that source; in 1941, 23.7¢. The proportions account for by policyholder premiums show a reverse trend. From 76.3¢ in 1941, the contribution rose to 78.5¢ in 1946.

Operating costs, including payroll, have also been going up recently. Last year they absorbed 15.5¢ of each dollar of income vs. 13.2¢ in 1945.

The effect of these factors is seen clearly in the trend of most companies' policy interest rates. By the end of 1946 the institute reports, many companies are expected to be using 24%, 24%.

as the basis for their policy com-
 missions. During the 1920's, the pre-
 vailing rate was 3% to 34%.

General?—Whether 1947 will show
 a trend in the rate of return on in-
 vestment portfolios remains to be seen.
 It seems some reason to expect that
 it will, however, though the rise may
 be slight.

With government financing needs
 high, for example, the insurance com-
 panies are not investing their new funds
 in treasury issues at the furious pace of
 a few years. Also, rates on new corpo-
 rate security offerings are generally more
 attractive than they were a year ago (BW
 7/47,p119). And the over-all return
 is being sweetened by greater pur-
 chases of the better-yielding preferred
 stocks.

Other Factors—The various new
 channels being used for investment of
 insurance funds should improve the
 average earning rate. So should the re-
 turn on more extensive purchases of real
 estate mortgages. Another helpful fac-
 tor should be the slight rise in bank
 interest rates since last summer (BW—
 2/47,p64).

But corporate securities will continue
 to play a big part in the life companies'
 investment plans. This factor was illus-
 trated last week when American Tele-
 phone & Telegraph Co. offered \$200-
 million of new-money 40-year, 2½%
 debentures. Reports indicate that just
 one of the Big Five life group took
 more than 40% of that offering.

GULF OIL EXECUTIVE

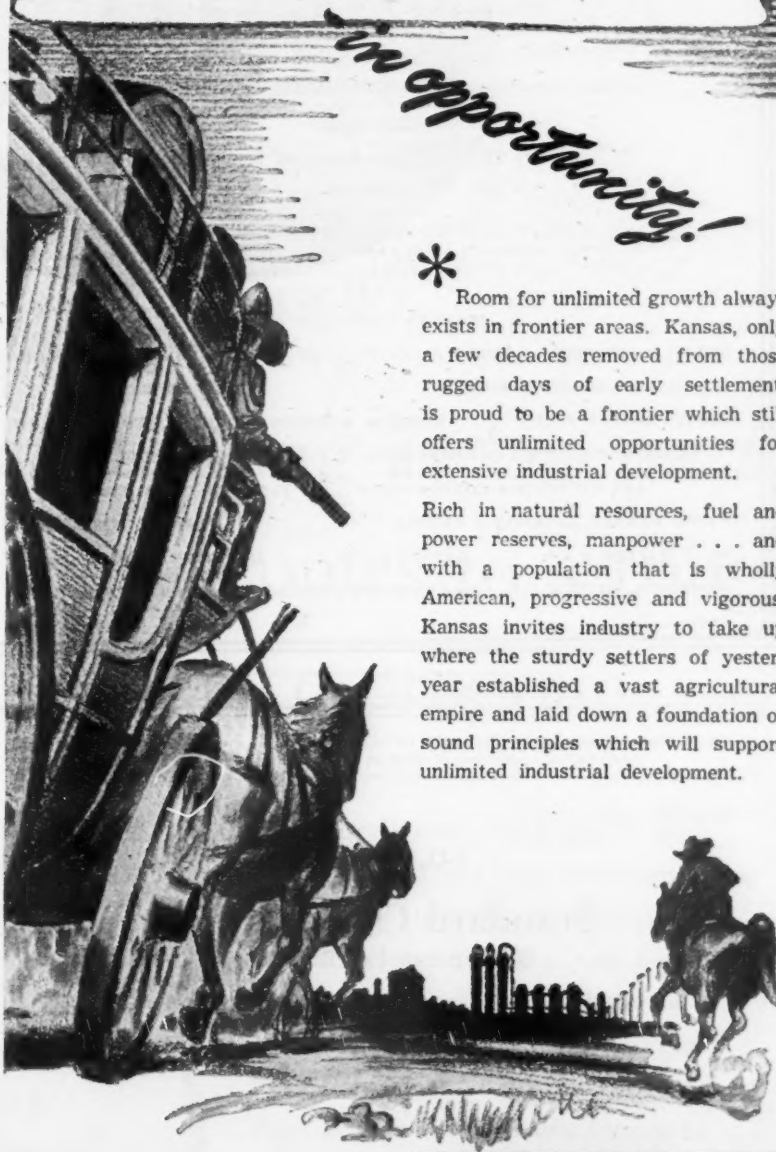
Sidney A. Swensrud, petroleum ex-
 ecutive, joins Gulf Oil Corp. this month
 as executive vice-president.

Swensrud was born in Iowa 47 years



Sidney A. Swensrud

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 facilities from pre-school to post-graduate
 courses are superior. Housing is
 excellent, living costs low . . . and living
 conditions such as these are an
 important factor in industrial efficiency.



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Forty Year 2½% Debentures

Dated June 1, 1947

Due June 1, 1987

Interest payable June 1 and December 1 in New York City

Price 102⅞% and Accrued Interest

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243,557 Shares

Standard Oil Company

(Incorporated in Kentucky)

Capital Stock

(Par Value \$10 a Share)

Price \$28.125 per Share

The offering is being made in any State only by such of the several Purchasers, including the undersigned, as may lawfully offer the securities in such State.

LEHMAN BROTHERS

June 6, 1947.

ago, started his career with Wash Crosby Co. (now General Mills), teaching at Harvard Business School, went to Standard Oil Co. of Ohio, became vice-president, director, and in 1946, executive vice-president.

During the war, Swensrud served the petroleum industry's committee on transportation, supply, and economic control. Since the war, he has helped prepare material for a special Senate committee on the petroleum resources of the

Profit in Safety

Deposit boxes are a lot easier to obtain, but they furnish needed revenue for banks. Rate increases appear

It's a little easier now to get a deposit box—but nowhere near as easy as the banks predicted a year ago. Demand is still strong. Needless to say, the banks are happy. In these days of mediocre earnings (BW—May 3, 47), any additional income is more than welcome.

• **Bonds Need Boxes**—The boom in strongboxes stems from the war, when many a family that never before had seen any financial paper got so used to it in the form of war bonds. With upset living conditions, etc., new capitalists squirreled away their precious papers in safety deposit boxes. Pretty soon no more boxes were available (BW—Aug. 7, 43, p. 106).

In 1945 and 1946 the already existing demand got another boost. Men returned from the armed forces with a sheaf of discharge papers, insurance policies, and similar documents. They, too, rushed to the banks for protection.

• **Slight Easing**—Currently, the slight easing is due to two factors:

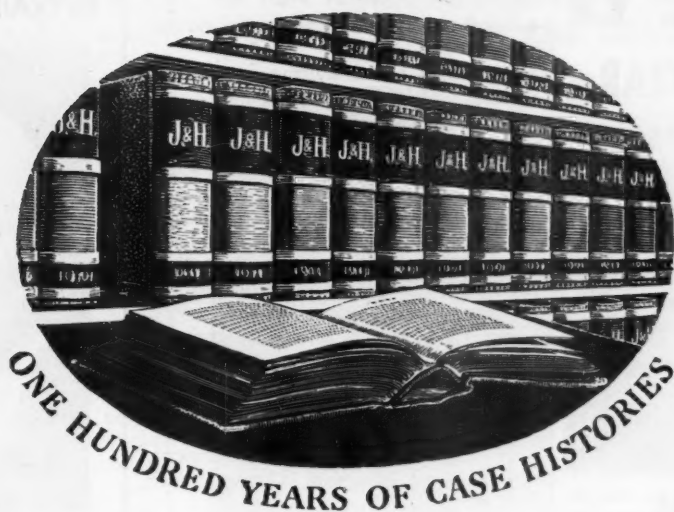
(1) Some families have cashed in their bonds, or moved away from the cities. Thus major banks have more boxes for rent. Branch and neighborhood banks, however, are still swamped.

(2) Banks are installing more facilities. The mighty Bank of America, for instance, has put in thousands of new boxes, is besieging manufacturers for thousands more.

A possible third factor—the end of the black market business—is postponed by bankers. There never were enough black marketers, say they, to more than a minute fraction of safe deposit boxes. Further, black marketers probably either blew in their money or invested it.

• **Pattern of Demand**—Biggest demand is still for the small-type box. Type is the experience of three Chicago banks:

• One has a waiting list of 60-90 days



There is no such thing as "*too much experience*" when it comes to setting up a business insurance program.

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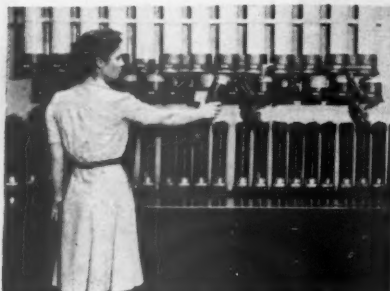
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WINNIPEG
HAVANA

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LAMSON TUBE SYSTEM

**Rushed paper flow among
seven buildings**

In a well-known airplane plant, the seven buildings were spread out over hundreds of acres. One building alone was three quarters of a mile from the main building. Knowing that human messenger service would have been extremely slow and costly, management installed a Lamson Tube System.

**Quickly carried communications
among numerous departments**

Four-inch Lamson Tubes carried mail, memos, telegrams, job tickets, requisitions, all written orders and small tools from one department to another at a speed of 30 feet per second. The money saved in a messenger service alone amounted to \$150,000 a year.

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Position

on small boxes. But it can supply large sizes immediately.

- Another has rented all its \$5 boxes, but has some at \$6.

- The third has a waiting list for all \$5 and \$6 boxes.

Most banks believe a high level of demand will continue. That's contrary to the pattern after World War I, when demand dropped. But this time the banks think the situation will be different because (1) more people now have valuable papers of one sort or another than 25 years ago; (2) more people live in cities—and city dwellers have fewer places to hide valuables than country people.

- **Rental Boosts**—Recently, such thinking led a number of banks in Philadelphia to kick the rental rates for small boxes. Heretofore, a bargain-basement rate of \$3 was common. The new tariff will be \$5.

Several Philadelphia banks also threaten to limit the number of visits a customer can make to his strongbox. Experience has shown that holders of the cheapest facilities are also the most frequent visitors to these facilities. But at \$5 a year, a bank loses money if it has to play usher too much. So some restrictions may result.

Investor Relations

**Survey finds corporation
management laggard in use of
public relations techniques to
tell its stockholders the facts.**

The Assn. of National Advertisers has run a sharp probe into one of the sore spots of U. S. business—the vital line of communication between management and shareholders.

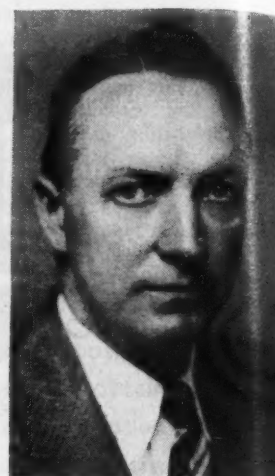
What it found is set forth in a 28-page "Survey of Stockholder Relations Activities," prepared by Manhattan public-relation counsel Verne Burnett in cooperation with both A.N.A. and the Journal of Capital.

The report confirms in detail what many have been suspecting: Despite long strides over the past decade, U. S. management as a whole still does not make use of modern techniques in keeping its shareholders informed.

Says the report flatly: "We believe that it can be inferred—fairly—from this study that among the tens of thousands of American corporations, a company which has an enlightened, carefully considered, and well-rounded program of stockholder relations today is really the exception."

- **Sample**—Burnett bases his conclusion on a comprehensive questionnaire answered by 100 companies (representing 3,500,000 stockholders), chosen because

IN TRAINING



The appointment last week of David K. E. Bruce as assistant Secretary of Commerce Harrison is intended to lead to a bigger job. He is being groomed for assistant Secretary in charge of the Bureau of Foreign & Domestic Commerce, if and when Congress authorizes that position. He is the son of a former U. S. senator from Maryland, William C. Bruce, who was a director in several Mellon companies; has served in the Maryland and Virginia legislatures. During World War II Bruce was a colonel in charge of the Office of Strategic Services' activities in Europe.

of the excellence of their annual reports. This fact only serves to underscore the national inadequacy: If better hands in the business can show a mediocre batting average, are the others doing?

In some instances, the response hit a fairly high average. All of them, for example, recognize the annual report as a public-relations tool by sending theirs to publications, labor organizations, educators, brokers in addition to the stockholders. Likewise, they have designated some executive department to supervise stockholder relations. The majority also send promotional material (newsletters, speeches, and like) besides reports and dividend closures.

- **Where They Fail**—But the companies fall down in other highly important respects: Only a handful make special efforts to increase personal attendance at annual meetings—despite the standing success of some firms' regional or dramatized versions.

- **Few acknowledge receipt of proxies.**

- **Just one firm has checked to find**

many of its shareholders own stock in other companies. Barely a third place financial or industrial advertising designed to attract interest of potential stockholders. Fewer than half encourage their shareholders to buy—or boost—company products or services.

Headed Right—The report does show a trend in the right direction. For instance, though only half of the respondents as yet send out welcome letters to greet new stockholders, 22 of them have begun the practice since 1940. Only 12 take the trouble to send letters of regret to former shareholders when the latter sell their stock.

Burnett points out that stockholder criticism has declined in recent years, due to: (1) more enlightened stockholder-relations programs; (2) improved dividends. Which poses the question: If dividends begin to fall off, will management use its new tools to stem a rising tide of stockholder criticism? One possible answer lies in Burnett's opinion that most managements have both "sensitivity and know-how" to improve stockholder relations—if they choose to do so.

PAY DIRT FROM PARKING

Thanks to intensified postwar traffic jams, parking meters have sprouted like mushrooms along U.S. business thoroughfares (BW—May 17 '47, p28). A current survey by the Municipal Finance Officers Assn. pins down in cold statistics what this has meant during 1946: The meter manufacturers chalked up orders for some 300,000 meters, 190,000 of which are to be delivered this year. This meant a bumper year that topped all previous records for the meter makers.

451 communities installed meters, raising the national level to 924.

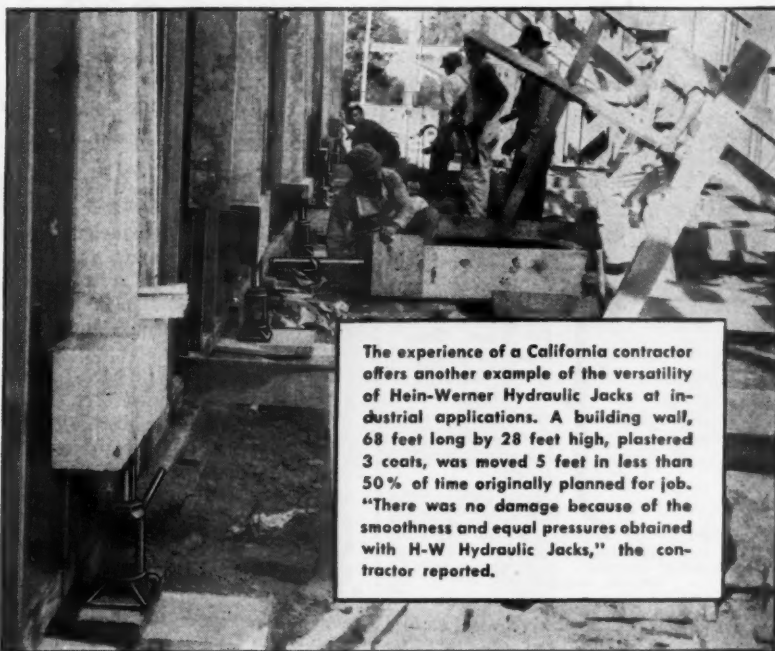
Manufacturers are not the only ones who have hit pay dirt. Though parking meters have a primary function of controlling traffic, they are pouring more money than ever into municipal coffers. The average parking meter had a take of \$100 last year, as against \$80 in 1945 and about \$60 in 1944.

S.

No decision is expected before next fall at the earliest on changes in stock brokerage fees. The Assn. of Stock Exchange Firms recommended recently that fees for buying and selling stocks listed on the Big Board should be raised sharply (BW—Apr. 26 '47, p123).

Reconstruction Finance Corp. has approved a \$16,600,000 4% loan to the Glenn L. Martin Co. to ease its working capital problems (BW—Jun. 7 '47, p67). An additional \$8,400,000 loan, RFC reports, is also under consideration

38 TON WALL MOVED WITHOUT CRACKING THE PLASTER IN HALF THE USUAL TIME!



The experience of a California contractor offers another example of the versatility of Hein-Werner Hydraulic Jacks at industrial applications. A building wall, 68 feet long by 28 feet high, plastered 3 coats, was moved 5 feet in less than 50% of time originally planned for job. "There was no damage because of the smoothness and equal pressures obtained with H-W Hydraulic Jacks," the contractor reported.

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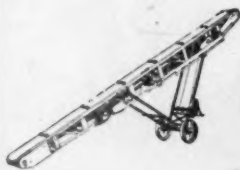
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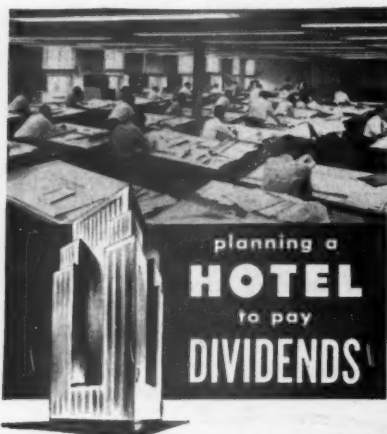


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LABOR

States Lead in Legislation

Many local laws go further than Taft-Hartley bill, ban closed shop, mass picketing, secondary boycotts, jurisdiction strikes. Federal bill specifically honors stringent state regulation.

Unions in more than half of the United States will operate this year under drastically tightened restrictions, no matter what happens in Washington. Many new state laws have already been written. Others are pending. At least half go well beyond the curbs provided in the Taft-Hartley measure.

These tougher state restrictions cannot be watered down by the courts on the ground that they conflict with federal policy. The Taft-Hartley language on union-security curbs specifically provides for the sanctity of state legislation more stringent than the federal law.

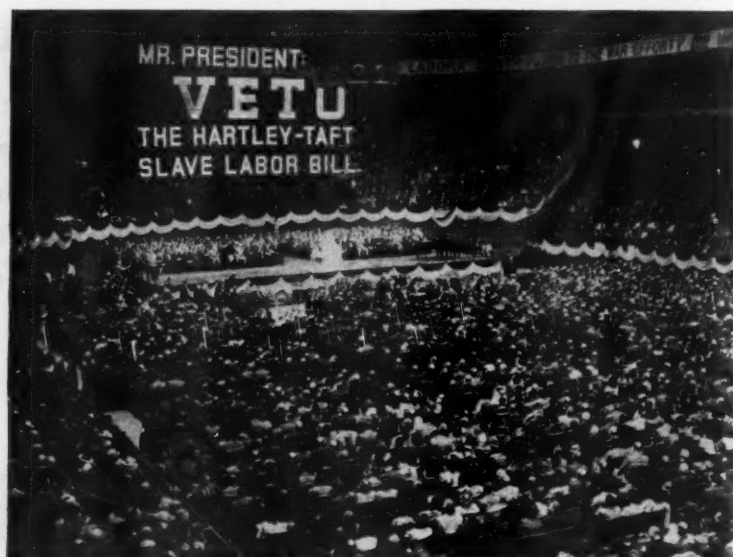
• **House Insisted**—This provision was written into the compromise bill at the insistence of House conferees. They had surrendered many of the strict curbs in the original House bill—including a ban on closed- and union-shop contracts

(BW—May 17 '47, p. 70). Purpose was to pass a milder version which would have a better chance for presidential acceptance, or for an overriding Senate vote in the event of a veto.

An important trend to strengthen labor codes has been evident in state capitals since January. It has been reflected in a wave of bans against closed shop contracts, restrictions on bans strikes and picketing, tighter regulation of internal affairs of unions.

• **Survey**—A recent survey by the U. S. Dept. of Labor showed that 74 bills to prohibit closed- and union-shop contracts had been introduced in 35 of the 43 state legislatures that met this year. Restrictive laws against union-security contract clauses had been passed in at least 12 states.

By the end of May, laws affecting



LABOR MASSES ITS STRENGTH FOR A VETO

Mayor William O'Dwyer proclaimed June 4 "veto day" in New York City, and 25,000 A. F. L. partisans responded. They jammed Madison Square Garden for a mass demand that President Truman veto the Taft-Hartley labor bill. This week, as the bill reached the White House, C. I. O. was even stronger in denunciations, warning of retributions, at its demonstration—a torchlight parade-rally.

Q. What one organization can

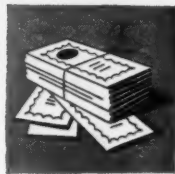
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..supervise its operation?



..underwrite its securities?



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STRAIGHT-LINE



COMMUNICATION



other established union practices, and therefore management-labor relations had been adopted in at least 18 states. Similar bills were pending in a dozen others.

Significant developments in state legislatures this year have included:

Delaware. A comprehensive new law requires unions to register and file semi-annual financial reports with the Secretary of State. It also: (1) provides that an employer may refuse to grant a closed-shop or union-shop contract; (2) bars the union hiring-hall employment system; (3) outlaws secondary boycotts and sitdown or slowdown strikes and movements; (4) makes mass picketing unlawful; (5) sets up unfair labor practices for unions as well as employers; (6) requires ratification of a strike by secret ballot; and (7) provides for voluntary arbitration and court action to enforce union contracts. The new law also sets a ceiling on union initiation fees.

Michigan. An omnibus labor bill, Gov. Sigler's desk for signing, bars mass picketing, prohibits labor leaders from promoting strikes by coercion, makes strikes illegal unless voted by a majority of members of the entire bargaining unit on a secret ballot containing the employer's last offer, makes arbitration mandatory for public utility and hospital disputes.

Missouri. The legislature, which already has passed a bill outlawing public utility strikes (BW—May 17 '47, p. 58), went a step further. It acted, over sharp labor protest, to ban jurisdiction strikes, sympathy strikes, secondary boycotts, and strikes by public employees. A new labor code also requires a majority vote, in a state-conducted secret ballot, to legalize a strike. It permits employers to apply to state courts for a restraining order against a union if a strike violates a collective bargaining agreement, and to sue a union for damages from breach of contract.

California. An emergency, wartime ban against secondary boycotts and union refusal to handle "hot cargo"—anything from a plant involved in a labor dispute—has been made permanent by California lawmakers. The bill became law without Gov. Earl Warren's signature. Warren, often mentioned for a place on the 1948 Republican presidential ticket, refused to sign the bill because he doubted the constitutionality of a law which might be used to restrict peaceful picketing. He refused to veto it because that would "deprive the people of the right to judicial interpretation of an act to the principle of which they gave their sanction at a general election" (BW—Nov. '42, p. 7).

Florida. Public utility management and A.F.L. utility union representative collaborated in drafting a proposal to

Labor-Relations Magazine

Increased academic attention has been given in recent years to the need for developing better informed, more responsible labor leaders. Newest step in this direction has just been announced by the New York State School of Industrial & Labor Relations at Cornell (BW—Feb. 19 p100).

In October Cornell will publish the first issue of a new quarterly Industrial & Labor Relations Review, the country's first academic journal to be devoted solely to these subjects. Prof. Milton Knoke will be the editor of the Review.

Objective of the Review will be presentation of the "most reliable facts and the best thought" on personnel administration, labor relations, business history, collective bargaining, social security, workmen's compensation, and related subjects. The quarterly also will contain book reviews and bibliographies, texts of pertinent documents in the field, and research reports.

Other academic journals—notably Harvard's quarterly Business Review—carry extensive labor-management material. However, the Review is devoted entirely to comprehensive coverage of industrial and labor relations.

utility strikes. The legislature, had a utility law on its agenda, and the management-union ver- patterned after the Indiana law (Apr. 5 '47, p99).

as. Labor legislation had high pri- or the 1947 assembly. Nine bills passed. They: (1 and 2) outlaw and union-shop contracts, and checkoff of union dues; (3) bar- ing of water, gas, and electric and light plants; (4) bar "mass- ing"—by more than two pickets plant gate or by two or more pickets closer than 50 feet apart; (5 and 6) law strikes against the state or its- tal subdivisions, and ban public- cees from entering into labor con- tracts; (7) make unions responsible for- ges from picketing or strikes due breach of contract; (8) make labor- sible under civil and penal laws any act constituting a conspiracy in- of trade, such as a boycott; (9) prohibit secondary boycotts,- ethy strikes, and other indirect- pressure techniques.

nesota. Three restrictive laws passed, outlawing secondary boy- banning strikes of hospital em-

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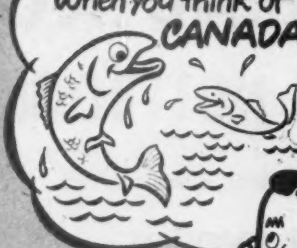
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employees, and making unions subject to court suits for contract violations. The antiboycott law contains a section which advocates of strong labor curbs believe could be used to bar union-security plans, and to curb picketing.

Iowa. One law enacted this year bars the closed shop; another prohibits secondary boycotts and jurisdictional strikes. A unique provision can be found in the law banning closed-shop contracts: A checkoff of union dues henceforth can be authorized only by "a

written order signed by the employee and by his or her spouse, if married."

Oregon. Two new labor laws apply only to intrastate employers. One permits a union or any employee to demand a state-controlled election to determine whether a dispute justifying a strike exists. The second bars secondary boycotts, and provides for recovery of damages by victims of boycott and "cargo" tactics by unions.

Maine. The legislature put before the electorate, at a referendum, a pro-

"Junior Unions" Attract Rural Children in South



A Georgia "junior union" studies labor history, sings labor songs

The union organizing drive, Operation Dixie, has been broadened in scope to include southern workers of tomorrow as well as today. Boys and girls in Georgia are now getting an early indoctrination in "effective union membership" through "junior unions."

• **How It All Started**—The Georgia Workers Education Service (a co-operative program established by A.F.L. and C.I.O. last year to further adult education in the state) organized the first "junior union" in the town of Greensboro, Ga. (pop. 2,500). G.W.E.S. had found that boys and girls were curious about unions. They wanted to know what a union really is—and why.

The answers weren't in school textbooks, so the union educational agency undertook to furnish them.

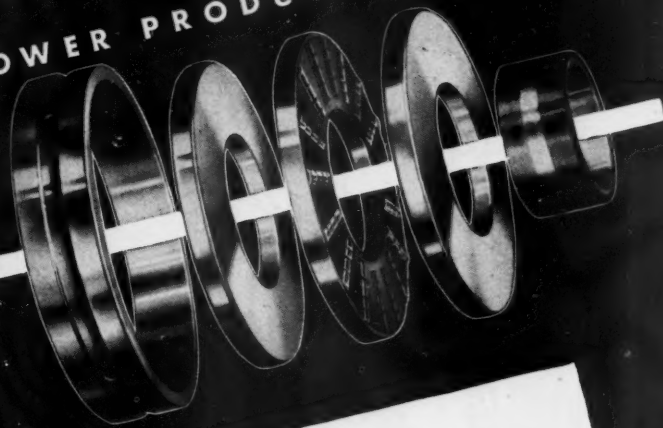
• **Play and Study**—To make it interesting, trained leaders offered a

rounded recreational program, including group singing, skits, folk dances and games, other diversions. On the serious side, leaders told "human stories of the background and history of the labor movement, and instructed the young 'unionists' in the niceties of parliamentary law and 'good citizenship.'

Sponsoring unions say instruction is intended solely to promote familiarity with unionism and not for the purpose of building up any prejudice against employers.

But management doesn't agree. Questions use of a musical recital called "Solidarity Forever" for workers' day programs. And it asks pointedly why familiar schoolroom songs have been sidetracked. Children sing instead, labor songs such as "Hill Dinky," "Union Maid," and—more distasteful to management—"Roll the Union On."

HOW TO MAKE MACHINES DO MORE ... AT LOWER PRODUCTION COSTS



the answer...

ROLLWAY BEARINGS with *Right Angle* **LOADING**

the advantages...

1. Solid cylindrical rollers of greater roller mass and uniform roller cross-section . . . greater resistance to shock loads and vibration . . . longer life expectancy under continuous heavy-duty service.
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THE FAMOUS PAPYRUS



If you're fresh out of papyrus scrolls, try this one with matches, toothpicks, pencils or broomsticks. The problem that the pharaoh posed was this: By changing the positions of three of the scrolls, create a figure of four equilateral triangles, all of equal size.

P.S. If you're stuck, there's a clue to be found in the picture.

There is also a valuable clue to be found today in the solution of difficult and costly metal turning problems. It is simply this:

Jones & Lamson Turret Lathes and Fay Automatic Lathes are designed specifically for the most efficient use of carbide cutting tools.

Carbide cutting tools have increased

horsepower requirements as much as 300 per cent. They have increased cutting speeds 200 to 500 per cent.

The chances are that turning accounts for 25 per cent or more of all machining time in your plant—that this is your major production expense.

There are cases in our files of savings of hundreds of dollars a month in the manufacture of a single part by the efficient use of carbide cutting tools on Jones & Lamson machines.

Telephone or write for a Jones & Lamson engineer who will be glad to consult with you on all phases of your metal turning problems.

If you want the solution to this puzzle, we shall be glad to send it to you.



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Springfield, Vermont, U.S.A.

Manufacturer of: Universal Turret Lathes • Fay Automatic Lathes • Automatic Double-End Milling and Centering Machines • Automatic Thread Grinders • Optical Comparators • Automatic Opening Threading Dies and Chasers • Ground Thread Flat Rolling Dies

to bar closed-shop contracts, second boycotts, sympathy strikes, and jurisdictional strikes. Another labor-relations bill, still in the legislative mill, may accomplish many of these objectives in advance of the general poll.

Utah. A new law bans second boycotts, sets up a code of unfair labor practices for unions, gives employers the right to petition for a state collective bargaining election.

Connecticut. Legislators sidetracked proposed labor-control bills, passed a mild law—without penalties—to bar discrimination.

North Dakota. In addition to vetoing a closed-shop ban (BW—Apr. 12 '47), legislators passed a bill which: (1) sets up a licensing system for unions; (2) requires a majority vote of all employees—not just of those voting or of those who are union members—before a strike can be called; (3) establishes a 30-day cooling-off period between a strike and a walkout; (4) outlaws picketing anyone except employees of a strike plant; and (5) outlaws secondary boycotts and sympathy strikes.

South Dakota. Requests to join a union are barred if "accompanied by threats of injury or damage to property" or penalties of up to 90 days in jail, fine up to \$300, are provided. Other laws bar closed-shop contracts, impose restrictions on picketing, and permit unions to sue or to be sued.

New York. The Condon-Wadlin bill (BW—Mar. 22 '47, p. 85) bars strikes against the state and political subdivisions.

Indiana and New Jersey. New laws bar public utility strikes (BW—Apr. 5 '47, p. 99; May 17 '47, p. 80).

Ohio and New Mexico. Legislatures voted to place before the electorate proposed constitutional amendments to ban closed- and union-shop contracts.

Georgia. New laws ban closed-union-shop contracts, restrict picketing.

Virginia. A special legislative session voted to ban closed- and union-shop contracts, restrict public utility strikes and limit picketing.

Tennessee, Nebraska, and North Carolina. Legislatures voted to ban closed- and union-shop contracts.

Arkansas. An anticlosed-shop constitutional amendment adopted in 1945 was made effective by a legislative measure which gave it enforcement teeth.

Colorado, Kansas, Idaho, Oklahoma, Wyoming, Washington, and West Virginia. Anticlosed-shop and other labor measures were rejected.

Arizona. The legislature voted to repeal the state's 1946 open-shop law (BW—Nov. 30 '46, p. 68) into effect, and to make unions liable in civil suits.

Labor legislation is still pending in a number of states, importantly in Massachusetts, Wisconsin, and Pennsylvania.

Victory Plus

A.F.L.'s rejuvenated union clerks wins on West Coast, presses determined organizing campaign across the nation.

It's a sign of the times that few strikes are ending in clear-cut union victories any more. Such an outcome is even rarer in a protracted, bitter strike which involves a business that can't classify as a basic industry. Thus, when a group of white-collar clerks wins more than it is demanded—after a seven-month strike during which police convoyed merchandise and strikers through the picket lines—the case is highly unusual.

Two Department Stores—Yet such is the history of the strike at Kahn's and Hasting's, two Oakland (Calif.) department stores. Last winter, A.F.L.'s Mail Clerks International Assn. asked the stores for recognition. Meeting refusal, its retort was to call a strike of salespeople.

The sanctity of what had been a reasonably genteel picket line became the biggest issue in Oakland's long labor experience when city police escorted delivery trucks through the line. Strained, A.F.L. and C.I.O. unions of the town joined in a general strike that paralyzed Oakland for two days (BW—12/7/46, p16).

Endurance Test—After that dramatic incident the strike settled down into a



James Suffridge: young leader of an union now being revived.

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We can help you, too!

THE first problem of an executive contemplating a relocation is to find a convenient source of information about available industrial sites.

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chase or rental, raw materials, shipping and power facilities. We have plats of hundreds of sites in twelve midwestern and northwestern states of growing industrial importance.

This confidential service, which has proved of value to the heads of large and small businesses alike, is briefly described in "How to Find a Home for Your Business." For your copy, write to J. C. Ellington, Industrial Commissioner, The Milwaukee Road, 300B Union Station, Chicago 6, Ill.

This simplified map shows only 60 of more than 2000 stations on The Milwaukee Road



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MECHANICAL DRAFT INDUSTRIAL AIR CONDITIONING FACTORY AND SPACE HEATING AIR FOR INDUSTRIAL PROCESSES

A sparkling human history of sixty eventful years in the world of MACHINERY and INVENTION

This book brings you the life story of a true pioneer of the modern industrial revolution. More than the autobiography of one man, it is the event-packed history of a world-shaking era of industrial development—cramped with names and inventions leading all the way from the bicycle to the atom bomb. At once vastly entertaining and highly informative, Fred Colvin's book turns the story of machine tools, and the men who have worked with them over the years, into a real romance of American industrial development. From the old-time machine shop to Oak Ridge, Fred Colvin has left his imprint in the world of industrial production. Now he has recorded his own rich memories for the many readers who share his fascination with his life's work.

Just Out!

60 YEARS WITH MEN AND MACHINES

By FRED COLVIN in collaboration with D. J. DUFFIN

Whittlesey House Publication, 315 pages, 6x9, 85 illustrations, \$3.50

Here is the nostalgic and interest-crammed life story of a man who has written more than forty technical books, and who served as an editor of *American Machinist* for more than thirty years. Embracing sixty years of contact with the great inventions of this era, and with outstanding inventors, scientists, engineers and industrialists, this entertaining history sparkles with life, amusement, and page after page of facts that Fred Colvin, at eighty, could not leave unrecorded. Every man connected with American industry will find himself captivated by the amusing personal reminiscences and the unique history that Fred Colvin's sharp memory and broad experience has enabled him to record.

CHAPTERS

1. The Machine That Can Reproduce Itself
2. In the Beginning Was the Belt Drive
3. Giving the Machine a Voice
4. A Society Sponsors the Machine
5. High-wheelers and High Iron
6. Natural History of the Automobile
7. I Join the American Machinist
8. From Maxim to the Jet Plane
9. Machine Tools and the First World War
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11. Machine Tools and Global Warfare
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85 photographs and drawings picture shops, personalities and inventions through a rich era of our industrial history

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test of endurance. The union's demands remained: recognition at Kahn's Hasting's. It had few members other Oakland stores. The two retailers maintained that, as members of Retail Merchants Assn. which bargained for 27 stores, they couldn't bargain a two-store or one-store unit.

Today R.C.I.A. is recognized as exclusive bargaining agent by the Retail Merchants Assn. It is negotiating its contract—which will cover 27 Oakland stores. The strike ended with the union winning more recognition than it demanded, and with a guarantee that the contract would include a maintenance-of-membership clause covering all present and future members.

• **Growth of a Union**—The Oakland outcome had the sweetness of triumph to James Suffridge, 38-year-old secretary-treasurer of R.C.I.A. The son of a local retail merchant, he began his union career when he started work as a grocery clerk in Oakland. The union was then named the Retail Clerks International Protective Association.

Established in 1890, R.C.I.P.A. was largely a grocery-store union until 1918. It had always been considered one of the stodgier A.F.L. affiliates, with nepotistic officialdom that had shown little allergy to organizing. In 1935 an active group, dissatisfied with the union's nothing policy, had split off to form what subsequently became C.I.O. United Retail, Wholesale & Department Store Employees.

• **Under New Management**—In 1935, however, Suffridge became international president in an upsurge of young elements within the organization that had changed its course. He took the secretary-treashership (where the real power in the union resides) last year, and the group now appears to be firmly in the saddle. Dropping the "Protective" from the union's name signaled the break with a moribund past.

• **Big Jurisdiction**—Currently R.C.I.A. is engaged in completing its conversion into a modern trade union equipped to take advantage of its jurisdiction—the largest potential membership in the A.F.L. Its membership expansion of more than 100% since 1944 gives it a present strength of between 200,000 and 250,000, a treasury close to \$1,000,000, and an annual income of over \$500,000.

It holds contracts with such firms in the department store field as Montgomery Ward; Sears, Roebuck; Bergend; Lord & Taylor; Gimbel's; Co.; Jordan Marsh; O'Connor, Macy's. In the specialty and variety fields, among others, with J. C. Penney; J. J. Newberry; W. T. Grant; Lerner's; Woolworth; Western Supply. It is in clothing and department stores such as Bond; Florsheim; Hats; National Shirt Shops. In the

Garment UMPIRE



Sol A. Rosenblatt (above) has been appointed impartial chairman of the \$500-million New York women's coat and suit industry—one of the nation's top arbitration jobs. He succeeded former Gov. Charles Poletti of New York last week, after Poletti resigned the job that he had held for one year (BW—Mar.30'46, to 108).

Rosenblatt, who served as impartial chairman for the industry from 1935 to 1940, was appointed by a committee which included heads of four employer associations and representatives of the International Ladies Garment Workers Union (A.F.L.).

represents salespeople in A. & P.; Way; Kroger; National Tea; and other distributors. It blankets almost completely in St. Paul, Minneapolis, Tacoma, and San Francisco. Outside of its marathon Oakland strike, the last year has seen R.C.I.A. doing its organizing work most forcefully in six cities. Results have been mixed.

Boston—3,000 employees of Filene's, organized in one of the country's oldest most benevolent company-initiated unions, voted themselves into R.C.I.A. A preference is being contested by the O., with which R.C.I.A. competed for their support. Stearns and Gillette are R.C.I.A. targets. Steiger's Holyoke went R.C.I.A., and organizing efforts are being pressed all over Massachusetts.

New York City—C.I.O. has the preponderant organization in the department stores, R.C.I.A. in groceries. A unorganized sector is being fought. The A.F.L. organization has con-

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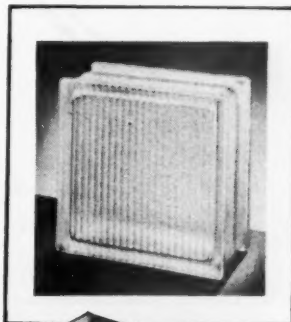
One way to combat rising production costs is to take full advantage of the economies inherent in the modern building material of countless uses, PC Glass Blocks.

Light—plenty of it—is directed to where it is needed most. So you save much of the money you would otherwise pay for artificial light.

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GLASS BLOCKS

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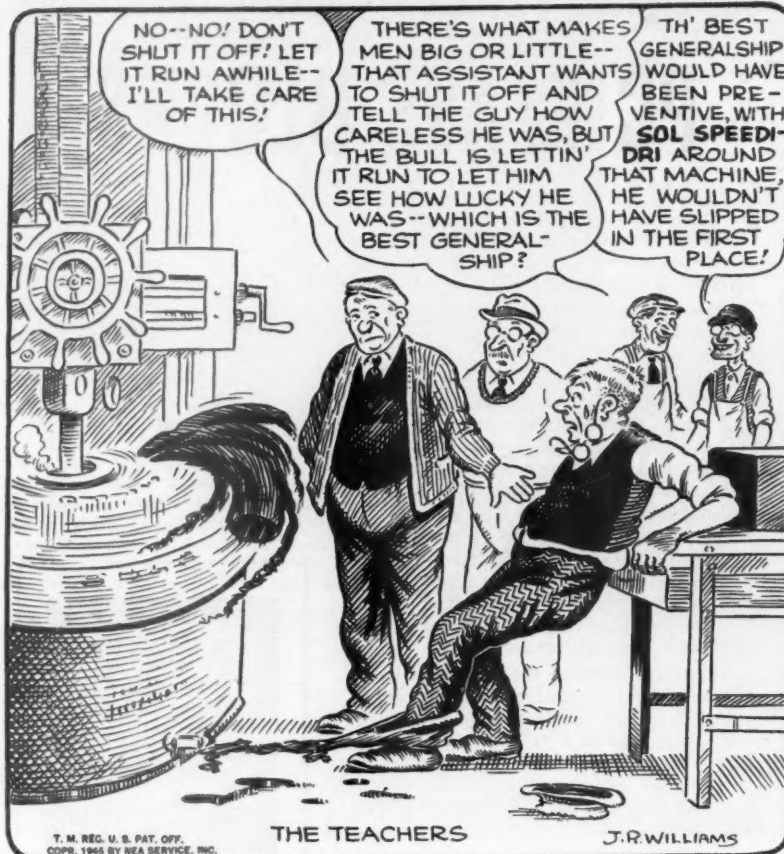
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duces the danger of fire—for it will not burn. It requires no expensive machinery—no trained personnel—for its use. SOL-SPEEDI-DRI works—while your employees work in safety!

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concentrated on writing into all of its contracts a group-insurance plan financed by a 3% payroll levy. It covers death, injury, illness, accident, hospitalization and surgical contingencies.

Buffalo—In winning a collective bargaining representation poll at the J. Adam department store, R.C.I.A. scored an important initial success in an intensive Niagara District campaign. The unusually friendly relations which it has since established with the J. Adam management (there is a possibility that the union may be offered office in the store) is taken by R.C.I.A. as an indication of a change in what it had assumed was a hostile attitude on the part of Buffalo retailers.

Cleveland—For R.C.I.A., Cleveland was, and still is, an important test ground. With most of the important chain and specialty stores organized, the union has been pegging away at Euclid Ave. department stores. A vigorous campaign ran into most of the problems R.C.I.A. must overcome in order to be a significant labor factor beyond its old grocery store jurisdiction.

The May Co. store in Cleveland, in the organizing efforts a threat to its interests. It unleashed a barrage of circulars against the union and its leadership—which included Sam Davis, who the R.C.I.A. had sent to Harvard and his wife Marie, who came to Cleveland originally as a representative of the International Ladies Garment Workers Union—which charged "Communism." This didn't make the organizing job any easier, despite emphatic and repeated denials by the union of sympathy or tolerance for Communism under any guise. Pushing ahead with the campaign in the face of obstacles which the ruling R.C.I.A. faces in other centers has helped temper the union for meeting new problems.

Denver—Here again it has been the May Co. which has been R.C.I.A.'s big concern. A 32-week strike, which ended with both the company and the union claiming victory, did bring a substantial gain for R.C.I.A. The strike's effectiveness was due, in large part, to the cooperation R.C.I.A. drew from other A.F.L. unions in Denver. The union pushed up the minimum wage from \$24 to \$30 a week; secured maintenance of membership, job classifications, what it considers a fair arbitration clause and elimination of sales quotas. The May Co. had insisted from the first that it would not surrender to union-shop demands; in poststrike advertisement headed, "We Have Kept Faith," declared that the settlement "guarantees to every employee, both present and future, a free choice as to whether or not to join the union."

Los Angeles—The settlement of a strike of food clerks in Los Angeles

Rochester, N. Y. discovers how to put wings on tax bills

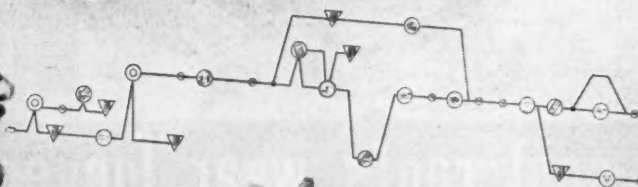


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scientific methods of analysis... constantly asking *why*. Rochester rebuilt a system—and made it *easier* to and collect taxes on time. A “show-me” investigation surveying the entire *procedure* and questioning each operation, analyzing *writing method*; checking *form design*... of wasteful, needless steps. Modern business machines used to their full efficiency, preparing accurate documents continuously and automatically.

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Aircraft Digest D-202, describes this Rochester story in detail. Phone The Standard Register Co. Sales Office in your city, or write us (on your business letterhead, please) for free copy.

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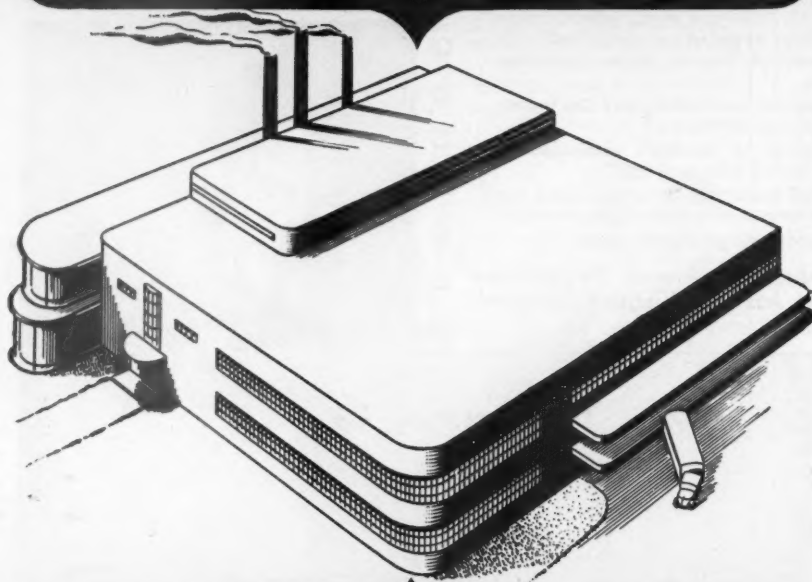
But in the cost of business operation, if waste, delay, inefficiency exist. SAVINGS here, through better management control, can reach almost incalculable figures!

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GILSALUME is a new aluminum roof paint that "protects because it reflects." One coat of Gilsalume forms a metallic shield that reflects 70% of the sun's destructive heat rays and seals out rain, snow, and frost, protecting roofs the year-round. Gilsalume's high reflectivity also reduces indoor summer temperatures as much as 15°.

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GILSALUME

ALUMINUM ROOF PAINT



PROTECTS BECAUSE IT REFLECTS

its suburbs for a 40-hour week, \$55 minimum made R.C.I.A. and booming union on the (BW—Feb. 17, 1955). In this the country, the organization is gaining its most spectacular gains most rapidly with its trade stuffiness. As in Cleveland, opponents are not only employers meet the attacks of left-wing groups and, as an extra hazard, entrenched interests of some unions, notably the teamsters.

• **For the Future**—R.C.I.A.'s national convention will be in San Francisco in July. It will concern national coordination of efforts, on planning a high coast-to-coast recruiting drive, taking the organization into political activities where it must cut more of a figure if complete the transition to a broader, progressive mass union.

A.F.L. Advertis

Taft-Hartley bill touches a campaign costing \$1 million.

Union may extend the drive a long-term proposition.

As one phase of its battle against the Taft-Hartley bill for the regulation of labor unions, the stolid American Federation of Labor launched one of its major advertising campaigns, spending more than \$1 million on a 15¢-per-member assessment. In a single effort, may raise the amount to \$1½ million.

• **Contrast**—Comparison with the cautious plodding policy of the A.F.L. is a measure of the drive's significance. Formerly the A.F.L. spent only \$100,000 annually on publicity and advertising. Gravity of the turn against it has caused the top brass of the union to consider seriously extending its temporary advertising into a long-term campaign.

The ad campaign is confined to newspapers and radio. Its copy is an arresting belligerence which is well apart from adjacent promotional soap flakes or constipation cures. It is that the A.F.L. is fighting against labor which has been called by "big business" in general and the National Assn. of Manufacturers in particular.

• **Lewis Contribution**—Observers to seeing the C.I.O. do the heavy lifting, wonder what has got into the A.F.L. One thing that has got into John L. Lewis. Since he shepherded his 600,000 United Mine Workers to the A.F.L. byre and settled the formidable bulk into the organization's executive council, there has

energizing of A.F.L. policy. L. is content to remain in the ground. But insiders report that plans for advertising were first made, he insisted that the campaign must be of imposing proportions, as by experts in the field.

It Works—Campaign details funnished by Phil Pearl, head of A.F.L.'s relations. Albert Frank-Guenther, advertising agency, places the paper copy and cooperates in the campaign. About one-third of the expenditures to 110 big dailies in 85 cities. Two-thirds outlay applied to broad-casting is handled by Furman, Feiner & Radio advertising agency.

The newspaper ad appeared on Apr. 15 headed "A free America cannot exist without free labor."

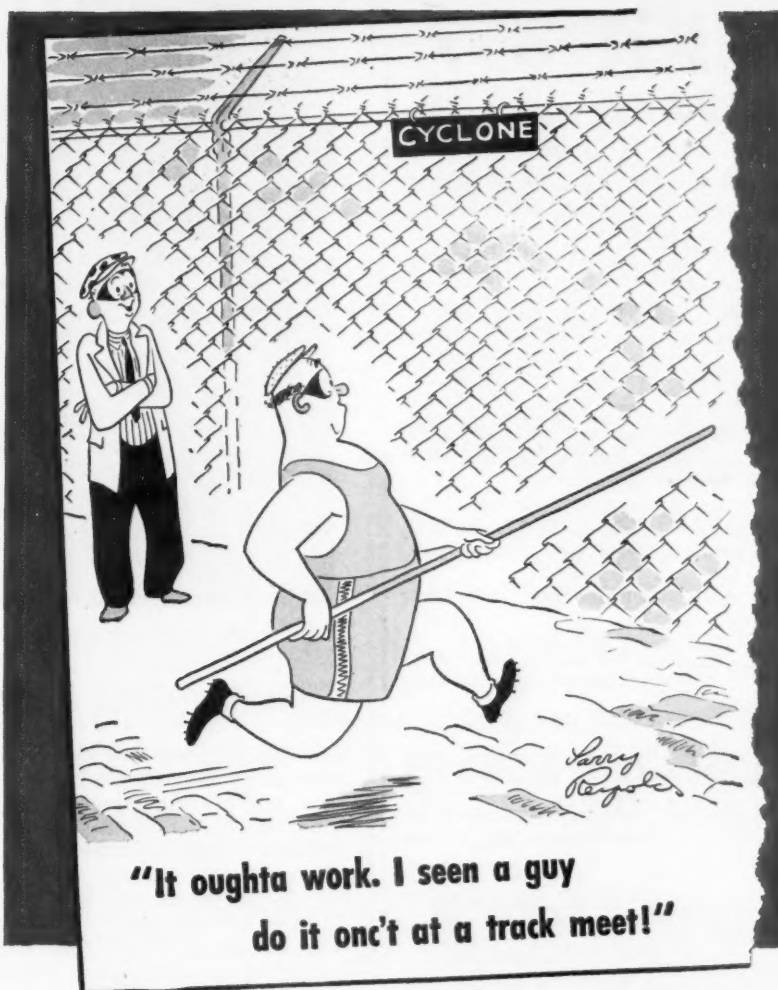
The rest of the series was one captioned "Don't be a NAM fool." One of the Christian Science Monitor, at this pugnacious pun. It suggested a milder version, "Don't let A.M. fool you," would be more suitable. Both the A.F.L. and the advertising agency declined to change copy, so the Monitor turned it down. It accepted the rest of the ads, however.

No Sparks—Numerous entertainers are helping spark the radio campaign. Despite this, Hooper ratings have been far from spectacular. A soap opera rated 1.5; big-name entertainment on Hollywood had a low evening of 2.9. Broadcasts also include important figures in education, politics, and politics. These are broadcast by American Broadcasting Co. Mutual Broadcasting System sta-

tional Broadcasting Co. and Columbia won't sell time for such controversial matters. They do give free time to straight addresses or debates, but grant equal time to the opposition. Congress acted on the Taft-Hartley measure, spot radio announcements were added. These are sharp rebukes (no songs) aimed at public pressure on President Truman behalf of a veto.

Personal Charge—Emmett Corrigan, chairman of the board of Albert Frank-Guenther Law, has taken personal charge of the A.F.L. account. One of the arguments in this agency's favor for the campaign it conducted for John L. Lewis and his U.M.W. during the 1943 campaign for portal-to-portal pay.

It is an interesting comment on the fact that the labor account is handled by an advertising agency long identified with the financial district of New York. Frank-Guenther Law is one of the oldest agencies in the business. Clients listed alongside A.F.L. are New York Curb Exchange; Chase National Bank; Merrill Lynch, Pierce, Fenner & Beane.



"It oughta work. I seen a guy do it onc't at a track meet!"

THE boys are trying a new approach to their fencing problem. Which suggests that you may want to try a new approach, too, if your plant isn't already protected by Cyclone Chain Link Fence.

Cyclone's solid construction and special design make it tough on intruders . . . and easy on plant management. Once installed by Cyclone's own factory-trained crews, your Cyclone Fence is there to stay—providing years of trouble-free protection despite difficult conditions of

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Why not call on our engineers to assist you in selecting the right fencing for your particular needs. Remember, *no job is too large or too small*. And in the meantime, write for your free copy of our illustrated book describing all 14 types of U.S.S. Cyclone Fence. It's full of facts that will help you get the most from your fencing investment.

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WITH ONE OPERATOR . . . ONE ENGINE

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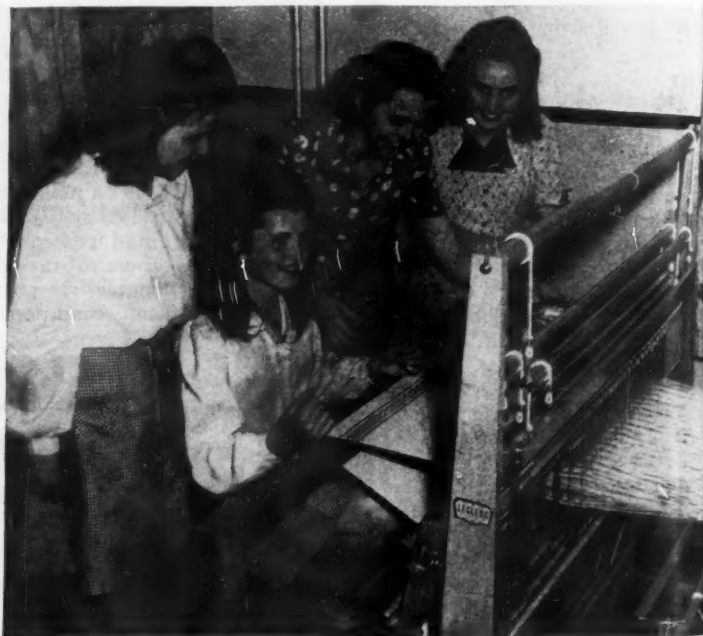


C.I.O. had a greeting ready for Ludger Dionne's imported textile work-

Canadian C.I.O. Protests Wages Paid to D.P.

Polish girls imported by Quebec manufacturer Ludger Dionne to relieve a textile labor shortage got a quick introduction to American trade unionism. C.I.O.'s Canadian textile union greeted them with invitations to join the union, told them their \$12 weekly contract pay "is no decent wage. Work only . . . for the same wage that Canadians get." Dionne brought more than 100 girls from

European displaced persons camps. They agreed to remain in his mill two years, also repay the cost of the plane trip to Canada out of a "savings" 21¢ hourly wage—the Quebec provincial minimum. Unions are protesting the plan as a low-wage "contract labor" device. Some of Canadian employers see it as a solution to labor problems, plan to import more abroad to recruit their own D.P.'s.



Polish D.P.'s get their first lessons in weaving—French Canadian style

INTERNATIONAL OUTLOOK

WEEK

14, 1947

SERVICE

Moscow is forcing Washington into new foreign policy decisions.

There will be no showdown with Russia just yet.

But it may have to come before the year is out. Perhaps before the London meeting of foreign ministers in November.

The State Dept. has learned its lesson in Hungary.

It had hoped to snatch Hungary out of Russia's grasp. This was to come off when the peace treaty with Budapest came into effect. But, instead, the Communists have made good their slogan "Hungary must not become another Greece."

Marshall's advisers are trying again to figure out what Moscow is up to. There are two theories:

(1) The coup in Hungary marks the limit of the Kremlin's present ambitions. Russia is preparing to withdraw its armies from southeastern Europe. Once they're gone the only security for Soviet influence lies in Communist governments.

(2) Russia has begun a general counteroffensive against the Truman Doctrine throughout Europe. This is merely a continuation of Soviet ambitions to control the entire continent. Communists will move next in Austria, or Italy. Communists are instigating and guiding the rail strike in France.

Both these theories could be right. The first may describe Moscow's minimum objective, the second its maximum.

How far Russia goes will depend partly on the U. S. reaction. And perhaps more importantly on political shakedowns in western Europe. Not even Moscow can fully control these.

But Marshall is taking no chances. He'll plan for the worst.

The State Dept. has written off southeastern Europe, except for Greece. With or without the Red Army, Russia will build a tight-knit Balkan federation. The U. S. will let it be—so long as it doesn't threaten Greece and Turkey.

The American program in Greece has led already to a sizable order for one U. S. company. Greece's sole rayon plant has ordered \$1,000,000 worth of filament rayon and staple fiber equipment from Oscar Kohorn & Co. of New York. Greek engineers will come to the U. S. to study production methods.

By contrast, Budapest may force American interests out of Hungary.

The Communist government is reportedly pressing Standard Oil of New Jersey to sell the Hungarian-American Oil Co., which operates the only producing wells in the country.

Temporarily, at least, the position may differ in middle-eastern Europe.

Czechoslovakia and Poland hesitate to tie themselves completely to such a bloc. Both are looking to the west for commercial deals. And the U. S. will try to keep the door open.

Poland has requested \$600,000,000 from the World Bank. Four bank officials leave this week to take a look at Poland's economy.

But they have an important new directive from bank president, John J.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
JUNE 14, 1947

McCloy. The bank will now consider political conditions which affect the economic status of prospective borrowers.

Washington is attaching more and more importance to Germany. To get the fullest British cooperation in speeding up German reconstruction, the U. S. gave way to London last week and agreed to a centralized administration for the combined American and British zones.

Now we are asking Britain to agree on boosting German steel production.

Completely reversing its former stand, Washington may want capacity raised to as high as 13.5 million tons. Our original target was seven million.

U. S. object is a strong Germany as soon as possible. Britain would go more slowly on this one. It hesitates to force a break with Russia on the German issue. It also fears future export competition from German steel.

Huge Middle East construction schemes may be announced soon. The impetus is coming from the oil boom.

Most spectacular are two projects in Iraq.

The first is a \$100-million plan for flood control and irrigation in the valley of the Tigris and Euphrates.

The second is the \$120-million development of the Iraqi State Railways.

Engineers and contractors for both schemes will be largely British.

A firm of British consulting engineers is making economic surveys of Syria and Lebanon. Construction contracts are expected to follow.

The economic cost of dividing India (page 109) will be high. Even before the British plan was approved by Indian leaders, financial centers in India were buzzing with rumors of the flight of Hindu capital from Moslem areas.

One report: \$750 million is on the move out of Punjab province in north-east India. Capital has left the Moslem port of Karachi for the Hindu port of Bombay.

Manufacture of radios will start soon in two factories to be erected in Hyderabad, a Princely State in Central India. Initial capital of \$2 million is being supplied jointly by interests in London and Hyderabad.

But Indian efforts to get in on production of the Kendall ("peoples") car (BW—Dec. 7 '46, p105) have failed.

Indian interests sank \$300,000 in a futile effort to get production started in Britain. The idea was to shift production to India later. When the company, Grantham Productions, Ltd., recently went into bankruptcy, Indians tried to salvage it, but failed.

A London syndicate, headed by F. Sidney Cotton, is taking over the Grantham plant with the Labor government's blessing. It has given up the light car field, will produce a one-ton tractor instead. Output of 100 a week is planned, if and when labor and materials are available.

Private trade between the U. S. and Japan will be resumed after Aug. 15. On that date American traders will be able to visit Tokyo and other Japanese cities. Contrary to original plans, representatives of U. S. companies with investments in Japan won't make their visit until later.

BUSINESS ABROAD

India Divides for Unity

Civil war ends as Hindus, Moslems accept partition plan. separate countries set up; British will withdraw this summer. Hindustan will be an industrial nation, Pakistan mainly agricultural.

Last week in India Hindus and Moslems drew back from the edge of civil war to begin carving their Asiatic subcontinent into two new independent nations—Hindustan and Pakistan.

American interest in the development of India goes beyond sympathy for India's claim to independence. If internal peace can be maintained, even at the cost of dividing the country, this will remove the threat of a power vacuum on Russia's northern borders. Further, it will give Britain the opportunity to push ahead with their plans for large-scale industrialization (BW—Oct. 26 '46, p. 113).

Original Plan—In February, Britain's new government offered India's 400,000,000 people their independence. The British agreed to leave the country by June 1948. By then, London hoped, the British would be able to frame their new constitution for a united India.

But India's leading political parties, the Hindu-dominated Congress Party and the Moslem League, could not agree how to use the power Britain was handing over. Instead they skirmished with each other in the preliminaries of a civil war that threatened to be one of the century's bloodiest.

New Plan—Lord Louis Mountbatten, the British Viceroy, advised London in May 1947 a new tack. The Labor government did. By June 3 Indian leaders

agreed to the new British plan on which the spadework had been done by Sir Stafford Cripps, one of the Labor Cabinet's big four. Here is what it provides:

- India will be divided into two nations—Hindustan and Pakistan. The Princely states will be permitted to join either one, or to maintain their individual independence (but with no link to the British crown).

- Dominion status will be granted immediately to Hindustan and Pakistan. Britain will turn over all of its power to the two nations by the end of this summer. Each nation is to choose by 1948 whether or not it will remain in the British Commonwealth.

- **Boundary Problem**—Defining the boundaries of Pakistan is a tricky business. Both sides in India had to make concessions to agree on the British plan for partition. The Moslem League, run by lawyer Mohammed Ali Jinnah, claimed the Moslem-majority provinces of northwest India (Punjab, Northwest Frontier Province, Baluchistan, and Sind) and, at the eastern end of India, Bengal and the Hindu-majority province of Assam (map, page 110).

The Congress Party, led by Jawaharlal Nehru, had long opposed the whole concept of a separate Moslem state. But Congress leaders, as early as February, admitted they would accept Pakistan as

a last resort if Punjab and Bengal were divided according to Moslem and non-Moslem districts.

- **Choice**—The British plan provides for just that. In the key provinces of Punjab and Bengal, the provincial legislative assemblies are to meet in two parts. One will represent the Moslem districts and the other the non-Moslem. Either part can decide for division of its province.

Result in Punjab will almost certainly be that both sides will want division. The eastern regions, inhabited largely by Sikhs (six million) and Hindus, will then decide in favor of inclusion in Hindustan. In Bengal, the Hindus of the western region (which includes Calcutta) will probably follow the same course.

Also voting (either through elected representatives or by plebiscite) are the Sind, the Northwest Frontier Province, British Baluchistan, and the Sylhet district of Assam. Since these all have Moslem majorities, the chances are they will join Pakistan.

- **The Rest of India**—The Princely States, with one-quarter of India's population, 45% of its area, fall into a different category. Nominally there are 562 of these semiautonomous states. Actually there are about 200 separate entities.

These states have received short shrift in the latest plan. In 1948 their relationship with the King-Emperor will end. They will not be accepted as separate members of the Commonwealth or of the colonial empire. Some may set up as independent kingdoms, but most will in time be absorbed either into Hindustan or into Pakistan. The majority are located in regions where Hindu authority will succeed British rule.

- **Division of Facilities**—The transfer of authority from British to Indian hands will be made doubly difficult by the division of India into two parts. India's railways, telegraph and telephone system,



Lord Louis Mountbatten

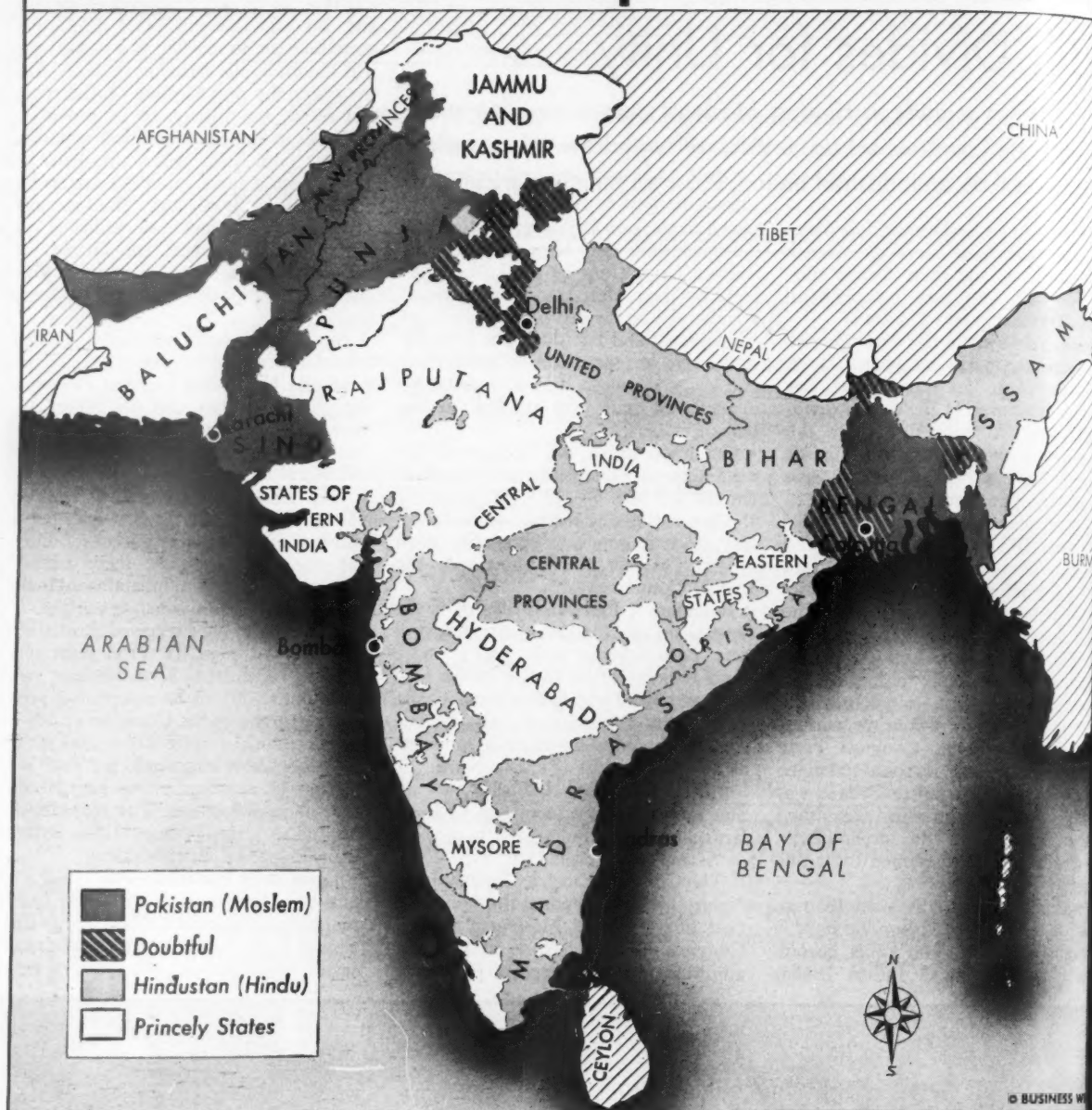
Sir Stafford Cripps

Jawaharlal Nehru

Mohammed Ali Jinnah

British statesmen placed their bets on harmony through division, wrung an accord from wrangling Indian leaders.

INDIA - A New Map to Be Drawn



and postal service are organized on a national basis.

Ownership and operation of these will have to be split between Hindustan and Pakistan. Mixed commissions will be set up to handle this problem.

Also slated for division will be the national debt and India's \$5 billion of sterling balances in London. The Indian army, too, will have to be split. Presumably the Moslem third of the army will choose to serve Pakistan. Joint defense arrangements would appear to be in order.

The division of Punjab presents another kind of problem, which is not peculiar to this province. Its network of irrigation canals—the greatest in the

world—spreads indiscriminately over Moslem and Hindu-Sikh districts. The electricity grid, operated largely from hydro stations, does the same.

• **Scapegoat Gone**—Governments in both nations will be on the spot. In the past, shortages of food or consumer goods could be blamed by both Hindus and Moslems on the British, or by one on the other. In the future the people will expect their own government to satisfy their needs.

Regardless of any customs barriers which may be set up between the two, trade is bound to flow across the new boundaries. To take a major example, Pakistan will have a food surplus and a deficit in cloth—the two basic elements

of the Indian economy. Hindustan have a surplus of textiles and a shortage of food.

• **The Moslem State**—Pakistan's population will be about 70 million. Its economic center will be in the North. Its chief resources are agricultural. It produces nine-tenths of British India's wheat surplus, one-third of the surplus, and one-third of India's cotton output. It is self-sufficient in wool, silk, oilseeds, and salt. It grows sugar and tobacco, has a large livestock industry.

Manufacturing industry in northern Pakistan is negligible. There are a few cotton and woolen mills and a cement industry. But the region

Why the Railroads Can't Afford NOT to Modernize!

*A Dollars-and-cents Example That Will Interest
Travelers, Labor and Investors*

For a long time the C&O has said that its railroads must modernize their passenger equipment—or forfeit a great opportunity.

In print and in private we have lambasted the "rolling tenements" that still serve for sleeping cars. We have stumped modern streamlined trains to replace creaking old day coaches. And over and over we have stated that, given better equipment, and new comforts and services, railroads could open the way to a new era of travel... The C&O is replacing every old sleeping car, day coach and diner on its main lines, with streamlined cars.

But Is It Practical?

Patterns in the industry are still changing their heads. But lately more sensible people have been asking, "How is the large-scale replacement of old equipment practical?"

They point out that several of our great systems had serious deficits in 1934. And everyone knows that the railroads are caught between rocketing costs and lagging rates. "How," they ask, "can an industry afford large outlays for equipment?"

The answer is that the railroads can't afford not to make these outlays. And this is a dollars-and-cents example:

The Investment That Is Fast Returning Its Cost

In August one of the C&O Lines, the Marquette, installed two new day-streamliners—the last word in passenger attractiveness.

The new trains have carried 86% more passengers than old trains carried over the same route during the same period of the previous year—when traffic was still down by war emergencies.



Which will it be—modernization or continued deficits?

Here is the proof of the pudding: In less than 4 years, at the present rate, the increase in passenger receipts will equal the total cost of the trains!

Modern equipment is not a luxury that only a few fortunate systems, like the C&O, can afford. Even a bankrupt railroad can borrow money today to buy such equipment at 2% interest.

Which Way Do We Go?

Railroads now face a critical choice:

If pessimist thinking, old-line practices and Toonerville equipment continue to be tolerated, then regardless of rate relief, further deficits and bankruptcies are certain.

But, if, on the other hand, these liabilities are replaced by modern ideas and modern trains, our railroads can again be a credit to our country. They can also be a bulwark of our national defense, which, as every citizen knows, depends on a flourishing transportation system.

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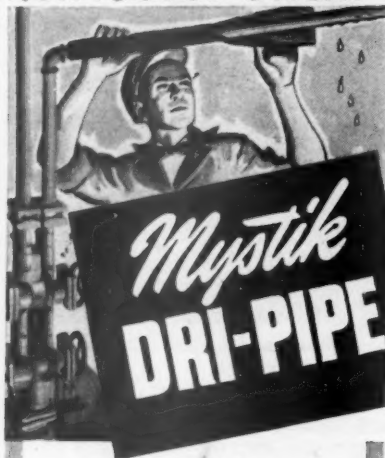
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	Estimated	Actual
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Roosevelt vote	25.2 millions	25.6 millions

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Lord Off to Run Peron's Five-Year Plan

Royal B. Lord, president of World Wide Development Corp., is off to Argentina. He will pick up the reins of his engineer-expert group, which will jockey Peron's Five-Year Plan (BW-Jan. 11 '47, p98) into practical, timetable form.

Last year Gen. Lord (retired Army Engineer officer) went to Argentina to lay plans for a World Wide branch in Buenos Aires. President Peron asked him to: (1) appraise the Five-Year Plan; (2) put a priority on its key projects; and (3) set a timetable.

World Wide has sent work teams to Buenos Aires to examine various phases of the gigantic reconstruction and development plan.

For the long run, World Wide has assembled a task force of engineering talent. About 50 experts, half of them from the U.S., are now at work. They will be in constant liaison with the government technicians. On this trip Gen. Lord will spend six weeks in B.A., make preliminary reports to Peron.

Chief feature of Gen. Lord's approach to his job in the Argentine is to substitute U.S. engineering-contracting techniques for the outmoded European system. Argentina has already been burned badly by unscrupulous promoters.

In some parts of Latin America, big engineering jobs have been turned over in the past to foreign or local

syndicates of engineers-contractor builders. Their jobs were often built, and the promoters skipped the profit.

Gen. Lord's job will be to work with the government to see that plans are the best and most modern available. Then, in the conventional U.S. manner, he'll ride the project through, concentrating on its quality and the timetable.



Royal B. Lord

potentially large oil deposits and large resources in water power. It also has the port of Karachi and a good system of roads and railways. Moslem capital now domiciled in Bombay and Calcutta will probably be used to push industrialization in the Northwest.

Eastern Bengal will also be weak in manufacturing. It has no coal, iron, or oil, and little water power. But it has most of the world's jute; more than enough food; some hides, silk, and tea. By imposing a stiff export tax on jute, eastern Bengal could force the jute mills of the Hindu area to move east. This might lead to establishment of a metal-working industry and development of the port of Chittagong.

• **The Hindu State**—Hindustan's population will be far greater—about 230 million. It possesses the elements of a great industrial nation. It can enhance this position if it absorbs Princely states such as Hyderabad (BW-Apr. 19 '47, p109).

Industrial expansion in Hindustan will be based on ample supplies of most basic resources. Reserves of high-grade iron ore (chiefly in Bihar, Orissa, and

western Bengal) are estimated at 1,000,000 tons, metal content.

India's coal is not as high in quality as the iron. But Bihar and western Bengal alone probably have well over 10 billion tons of good-grade coal. Manganese is found in almost unlimited quantities and in close proximity to coal and iron. India ranks next to Brazil as a leading producer of manganese.

Hindustan has extensive deposits of bauxite, and modest supplies of chrome, and magnesite. It will be the world's largest producer of mica.

• **Basic Industries**—Hindustan has a large and thriving cotton-textile industry, whose most important center is Bombay. India's total output, valued at all in Hindustan, was 550 billion in 1941, produced on 200,000 looms. (In 1940 India had 10 million spinning spindles.)

Iron and steel is the other great industry. Steel capacity is now about 1,000,000 tons a year. Plans call for an additional million tons or more capacity. Tata Iron & Steel Co.'s mill at Jamshedpur in Bihar (BW-Jun. 7 '47, p109) produces more than half India's pig

will expand to maintain its position and since the war, other industries have been expanded or founded. Important of these are chemicals, plastics, rayon, and electric plants are being built. British and American capital is playing a large part in development.

Nationalization—By American standards the political climate will not be so favorable for industrial expansion in Hindustan. The Congress led by Nehru, will form the first government. Nehru, and the younger leaders, are committed to central planning and nationalization of industries.

Opposition party will probably be the Nationalist Party, which recently broke out in Congress. The bulk of India's labor is in Hindustan. It will be more and more socialism.

Political prospects for business are better in Pakistan. Jinnah and his League will form the government. They are more likely to nationalize except when it comes to take over Hindu-owned industries. Lacking Hindustan's resources, Pakistan may be more ready to give exclusive licenses (in oil, for instance) to foreign companies wishing to establish within its borders.

Future—Pakistan's political future with Britain are likely to remain regardless of whether the nation remains in the Commonwealth after 1948. Moslem leaders will also try to sever ties with the Arab nations in the Middle East. Pakistan will be the Moslem nation in the world.

Hindustan is less likely to remain in the Commonwealth after 1948. But it will not sever its ties with Britain and dominions. Indian politicians also see the necessity of western help in maintaining a Eurasian balance of power and their security from Soviet domination.

British standards and specifications are deeply imbedded in India's financial and industrial life. The \$5 billion loan to India will give British an additional advantage in supplying India's needs for capital goods now-how. Britons are already using (BW—May 31 '47, p80).

For India's Hindu leaders look upon themselves as the natural leaders of Asia. Industrially, they expect to see Japan as the chief supplier of consumer goods to the Orient. Politically they aim to become the chief players of the remaining colonial powers.

Since Russia lies nearby (the only super power in Asia), they hope for friendly relations. But they can be expected to resist any Russian effort to interfere in their affairs.

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(Daniel Starch Survey for BW.)

THE MARKETS

(FINANCE SECTION—PA)

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial	142.7	141.7	137.8	178.6
Railroad	38.3	39.1	38.2	65.7
Utility	71.6	72.0	72.3	95.0
Bonds				
Industrial	123.2	123.1	123.3	123.9
Railroad	106.8	107.0	110.0	118.9
Utility	112.6	112.6	113.2	116.0

Data: Standard & Poor's Corp.

Stocks Still Rallying

Will the individual taxpayer receive some 1947 relief from high personal income tax rates?

Will the Taft-Hartley labor bill be signed by President Truman, or be repassed over his veto?

If you consider the stock market a reliable oracle, the answer to at least one of those questions would appear to be yes. Not for some time have stocks displayed so much price buoyancy as they have lately.

• **Rebound**—By the middle of this week the Dow-Jones industrial stock index had climbed back up to levels that were around those reached in early May. (That was before the start of the 11-point decline which culminated in an "unsuccessful" testing of last fall's bear-market lows.)

Up to midweek the D.J. rail average hadn't been able to match the almost complete recovery that had been revealed by the industrial group. Nonetheless, even that laggard index had man-

aged to erase some 62% of its May

• **Still Professional**—There were signs this week, however, that the general public was showing any more interest in the market than previously. It was evident that the impetuous move was still being provided mainly by Wall Street's professional traders.

There were no signs, either, that the rally was forecasting any immediate change in the major price trend. Conservative Streeters were ascribing advance to technical considerations accentuated by short-covering operations and today's notoriously thin market.

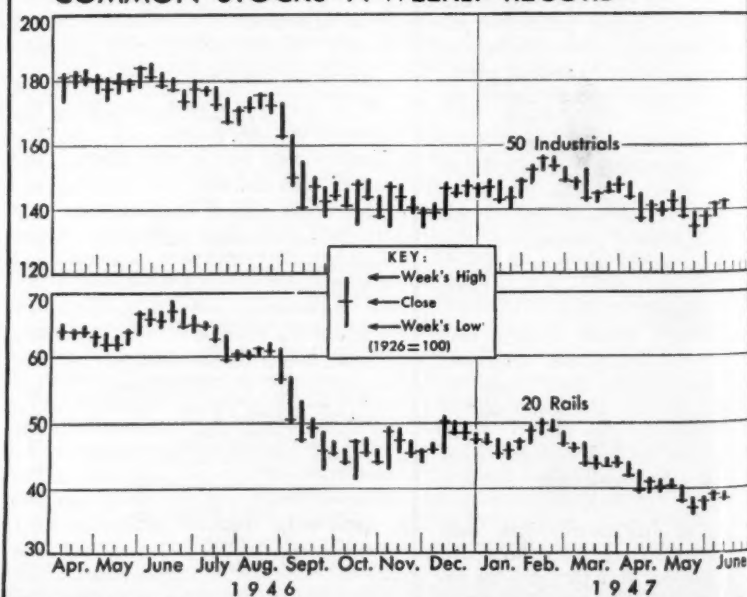
• **Not Yet Over?**—But that doesn't mean that the group believes the immediate rally is about over. In fact, they see interesting potentialities on the up side, especially if some or all of the Washington labor-tax news is favorable.

Nevertheless, they are advising "cautious participation" in the present rally, only to clients they know to be experienced, nimble traders. Others, however, believe, should at least be in the rally only for upgrading the quality of portfolio holdings. They expect to see better buying opportunities later.

There appears to be one major exception to this don't-buy rule: The oil industry generally continues quite bullish about most of the oil stocks.

• **Tucker Issue Held Up**—This week's much-publicized plans of the T. V. Corp. to sell four million shares of stock (BW—May 24 '47, p. 24) were delayed, at least temporarily. The Securities & Exchange Commission is

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

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ings to determine whether a order should be issued. The com- said it had "reasonable cause to" that the recently filed registra- included untrue statements of ma- facts, and omitted other material A hearing on the matter has been for June 16.

Bad News for A.T.&T.

holders of American Telephone graph Co common stock have ments recently as to the security of regular \$9 annual dividend (BW- 47,p58). And the last week or ne brought news that isn't going their worries any:

ow evident that A.T.&T.'s divi- income from its operating subsidi- going to be cut sharply this year. important units of the system as Telephone & Telegraph Co., Il- Bell Telephone Co., and New Telephone & Telegraph Co. ade smaller declarations this year est. As a result, the parent com- dividend income in 1947's first nths will come to only about \$7- , compared to over \$16 million in e period of 1946.

porarily, at least, investors are g none of their usual enthusiasm &T.'s new-money financing op- s. This break with precedent was ticeable last week in the case of mpany's latest bond issue (BW- 47,p119). Despite a fast initial y, that \$200-million operation has into about the stickiest Bell Sys- derwriting job that Wall Street er experienced.

Focus—Last week's dividend ac- Pacific Tel. & Tel. brought arp focus the subsidiaries' cur- ability to help support their par- the style to which it has become med. In 1946, that subsidiary 1.50 quarterly on its common . It even sweetened the pot with tional 25¢ in the second quarter. rising costs cut profits in the first r of 1947 to only \$1 a share. Only expected to be earned in the quarter. And it's now estimated f rates are not raised soon, the wage boost will hold last-half gs down to about 19¢ a share.

ecting this trend, the directors cut arch dividend to \$1. Now they announced that only 65¢ will be June—\$1.10 less than a year ago. end Omitted—The Illinois Bell d situation is even more serious. ear it paid \$1.50 each quarter. But sharply lower earnings, it could only a 50¢ payment last March. has just announced that no June ement at all will be possible.

pt for two quarters during the sion, this is the first time since that Illinois Bell has passed a

quarterly dividend. Even in 1934 it was able to pay a total of \$3.50 a share. And aside from that year, annual payments haven't dropped below \$6 since 1893.

• **New England Cut**—Since 1900 New England Tel. & Tel.'s annual dividend rate has ranged between \$5.75 and \$8. Last year it made regular quarterly payments of \$1.50. This year will tell a very different story: In March a \$1.25 dividend was declared; only \$1 will be paid in June.

All the subsidiaries in question have applied for rate increases to offset today's higher costs. Pacific Tel. & Tel. has even requested emergency relief in the form of a 6.3% surcharge on all telephone bills pending a ruling on its formal application. But official rate-making bodies are notoriously slow to act. So it is problematical how soon A.T.&T. and its subsidiaries can expect any relief from this source.

• **Syndicate Dissolved**—Concrete evidence of the stickiness of the latest A.T.&T. bond offering came to light this week. The 40-year, 2½% debentures were originally offered at 102½% of par—a 2.76% yield basis. On Monday the 106-member syndicate that had acquired the issue at competitive bidding at a cost of 102.219% was dissolved. And the open-market price of the bonds immediately slid 1½ points below the original offering price—more than half a point below the cost to the syndicate.

Wall Street estimates that only slightly over half of the issue had been distributed before the syndicate decided to close up shop and let the bonds find their own level. Since Monday heavy placements of the bonds at around 101½%, or on a 2.80% basis have been reported. Nonetheless, at midweek plenty of bonds were still available. How this episode will effect future A.T.&T. financing plans remains to be seen.

Another Trading Market Opens

Trading in copper futures is slated to be resumed on New York's Commodity Exchange, Inc., on July 15 after a lapse of five years. It returns under conditions quite changed from those that prevailed before the war.

Back in those days the American duty of 4¢ a lb. on foreign metal made the New York copper market exclusively a domestic affair. At that time all world trade in the red metal was channeled into the hands of the free-trade London market.

Congress, however, recently suspended the import tax on copper (BW-May10'47,p107). The London market has been closed since 1939, and shows no signs of reopening soon. Consequently, New York's postwar copper market is expected to disclose a substantial gain in breadth and activity once the ball is started rolling again.



Mr. Dodd couldn't say no...

... Not when Mrs. Dodd was obviously sold on the dashboard. So naturally, he bought a Slipstream Six—chartreuse upholstery, Jet-Flow body, Atomic carburetor, and all.

"If Mrs. Dodd likes it . . . Well, I guess you can't go far wrong on any good American car."

And with that observation Dodd, a master diplomat if no master mechanic, bowed discreetly out, leaving only a check behind him.

But when it comes to buying stock in the company that makes the Slipstream Six—or any other auto—there Dodd is a far more critical customer. And rightly so.

Like any smart investor, he wants to know a lot about the company he puts his money in. What's the earnings record? How's the labor situation? Are rising costs eating up profits? Is the dealer organization strong? What shape is the plant in? What kind of competition will the company have to face?

It's for Dodd and thousands of investors like him that we have just completed a comprehensive review of the automotive field. We've put the findings—good and bad—on the industry as a whole all into our new booklet "Motors", with full details on 9 auto companies and 15 accessory manufacturers. If you own automotive securities or are considering the purchase of any, we'll be glad to send you a copy. Just write to:

DEPARTMENT S-9

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THE TREND

NOT A BANK FAILURE FOR TWO YEARS

"When I studied elementary economics in college, my professor taught me that a commercial bank which goes in heavily for long-term loans is headed for trouble. It is my impression that our experience in the early thirties bore out the professor's teachings. The long-term loans could not be cashed fast enough to give the depositors the money they demanded, and many devastating bank failures resulted. Now I observe that our commercial banks are going in for long-term loans in a big way. How come?"

• This pointed inquiry by one of our more reflective friends has prompted us to take a special look at the development of the long-term business in commercial banking. Some of our findings are reported here

Our friend's observation that commercial banks are going in for long-term loans is amply supported by the facts. For example, the New York Federal Reserve Bank, in a recent Monthly Review, reported that loans running for more than one year constitute 44% of the total volume of all business loans made by its member banks. Twelve years ago, the figure was only 10%.

But the implication that the long-term loan is a siren likely to lure our commercial banking system onto the rocks is not so well grounded. The theory that such long-term loans caused the banking crash of the early thirties is somewhat too simplified. Though the final word on the basic causes of that terrific crop of bank failures is yet to be recorded, it seems reasonably clear that they were due more to deterioration in the quality of loans and investments than to a switch to long-term loans.

• For years before the 1929 crash, commercial banks, contrary to the professor's dictum, had safely used their funds in considerable degree for other than short-term self-liquidating loans. In 1915 a quarter of the earning assets of the Federal Reserve member banks consisted of investments in government and corporate securities. By 1929, that share had grown to 30%. This wasn't serious so long as the investments could be sold any time without appreciable loss.

But toward the end of the twenties large numbers of relatively weak banks were competing to make loans and investments, with the result that quality fell off. A study of a typical group of country banks, for instance, showed that the market value of their bond holdings dropped almost a third between 1928 and 1932. This depreciation played a more important role than the increase in long-term loans in bringing the banks to grief.

Even if the numerous long-term loans did play a supporting role in producing the 1929-33 debacle, that fact may no longer be pertinent. Many changes, primarily introduced by World War II financing, have since taken

place in the conditions under which commercial banks operate. The war brought a huge growth in deposits and in bank holdings of government securities. Deposits in commercial banks today are two and one-half times the prewar level. Bank loans have soared since the end of the war. But they are far less important investments, which now make up three-quarters of earning assets. What is more, 90% of these investments represent the \$75 billion of federal government securities held by commercial banks.

Government securities are like interest-bearing bonds. To finance the war at low interest rates, the Federal Reserve system established what is in effect a guaranteed market for government securities. A bank that has funds can sell government bonds without risk of loss. Even though the Federal Reserve system might modify some of the techniques it uses to underwrite the government bond market, it cannot withdraw this support.

• Thus, the banking system is in extraordinarily good shape today, as far as meeting the demands of depositors is concerned. Over two-thirds of bank assets consist of either cash or government securities. Moreover, the quality of other bank investments, as well as of other loans, has been maintained. Probably the best evidence of this is the decreasing number of bank failures, shown in the following table (by years, with number of commercial bank suspensions):

1919.....	50	1929.....	659	1939.....	
1920.....	119	1930.....	1350	1940.....	
1921.....	505	1931.....	2293	1941.....	
1922.....	366	1932.....	1453	1942.....	
1923.....	646	1933.....	4000	1943.....	
1924.....	775	1934*.....	57	1944.....	
1925.....	618	1935.....	34	1945.....	
1926.....	976	1936.....	44	1946.....	
1927.....	669	1937.....	59	1947 (4 mos)	
1928.....	498	1938.....	54		

* Federal Deposit Insurance Corp. established.

Of course, it is always possible for banks to get into trouble. Some banks have a relatively small proportion of their investments in government bonds. If they go in for risky loans and investments, they would not be able to get out of trouble by cashing in government securities. Moreover, continued good business could conceivably induce banks to cash in their "government" securities and invest in business loans and securities which offer higher interest but with greater risk. This could be a real trouble if business slowed up enough.

• As matters stand, however, our commercial banking system is in almost fabulously good shape to meet the demands of depositors. This is one of a considerable number of tremendous underlying strengths in our economic situation which were notably absent after World War

